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*Dolomite strongholds : the last
untrodden Alpine peaks*

Joseph Sanger Davies

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Received *22 March, 1897.*

A

Dolomite Strongholds

THE LAST UNTRODDEN ALPINE PEAKS

AN ACCOUNT
OF ASCENTS OF THE
CRODA DA LAGO, THE LITTLE
AND GREAT ZINNEN, THE CINQUE TORRI,
THE FÜNFFINGERSPITZE, AND THE LANGKOFEL

BY THE
J. Sanger
REV. J. SANGER DAVIES, M.A.,
QUEEN'S COLLEGE, OXFORD; MEMBER OF
THE ALPINE CLUB

WITH MAP AND ILLUSTRATIONS BY THE AUTHOR

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LONDON

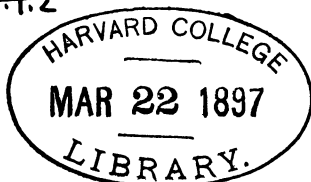
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PREFACE.

THE many charms of the Dolomite Mountains—their varied surfaces, romantic outlines, distinct individualities, and, above all, their marvellous colouring—had exercised a fascination over me, long before I learned that a few of these enchanting peaks had a reputation of their own from a mountaineering point of view.

There are, perhaps, a hundred of them in all, of various shapes and sizes, none rising above 11,000 feet, and few of them failing to attain a nearly approximate altitude. While some of these afford the easiest ascents of any mountains of equal height in the whole Alpine chain, others are so steep and smooth-sided that they offer the best rock-climbing in Europe, and

for some years presented the last "untrodden peaks" of the Alps.

Among these are the Kleine Zinne, first ascended in 1881; the Croda da Lago, conquered in 1884; and the Fünffingerspitze, which held out until 1890.

In comparison the other Alpine districts were soon exhausted. The Oberland was the earliest to succumb. The Pennine Alps surrendered with the capture of the Matterhorn by Mr. Whymper's party in 1865. The independence of the Dauphiné group ended when Monsieur Boileau de Castelnau surmounted the arduous summit of the Meije in 1877; while one solitary monarch lingered to Chamounix until the year 1878, when the Aiguille de Dru was ascended by Mr. Dent.

He thus writes of the Dolomites: "Certain it is that a climber of some experience among the Swiss rock-mountains, or the crystalline aiguilles of the Mont Blanc district, will probably find himself utterly at sea at first on

these jagged, steep little dolomite peaks. There are many tales of places quite inaccessible unless the climber takes off his boots."

By the kindness of a leading member of the Alpine Club I was provided with a list of the best of the Dolomites; and, with the aid of good guides and the memory of youthful scrambles on the cliffs of Britain, they were successfully attempted.

Although experts have said that "descriptions of rock-climbing are notoriously unsatisfactory," this book is a venturesome endeavour to put before the general public a simple record of personal experiences upon these unique rock-mountains. If there should be found in it enough of interest to stimulate a desire to make a closer acquaintance with the prettiest scenery and the grandest rocks in the Alps, no one will be better pleased than

THE AUTHOR.

PREFACE TO THE SECOND EDITION.

As two years have not yet elapsed since the First Edition was published, there is little to be said in preface to the Second.

A word, however, is needed as to nomenclature and orthography. In a district like the one dealt with, where two races mingle and two languages overlap, there will naturally be some diversity in the treatment of place-names.

For instance, German maps give at least four different spellings for "Marmolata," and two of these appear in the same book; we have also both "Eisach" and "Eisack" in one standard work, while another authority gives both "Eisack" and (a third form) "Eisak," in the same volume. The Croda Rossa has appeared in print under no less than five names, and the

Croda da Lago under six. Amid so much variety choice is not easy. However, if not infallible in this region, Baedeker is indispensable, and "The Eastern Alps" for 1895 has been in the main the authority for our text.

I cannot close without acknowledging the merciful dealings of those invisible but omnipotent beings—the Reviewers. To their forbearance, no less than to their appreciation, the writer owes his rescue from oblivion, and the publishers their preservation from loss; and to the same beneficent sources the new readers (if any) may attribute the circumstances which rendered necessary a Second Edition.

CORTINA D'AMPEZZO,
May, 1896.

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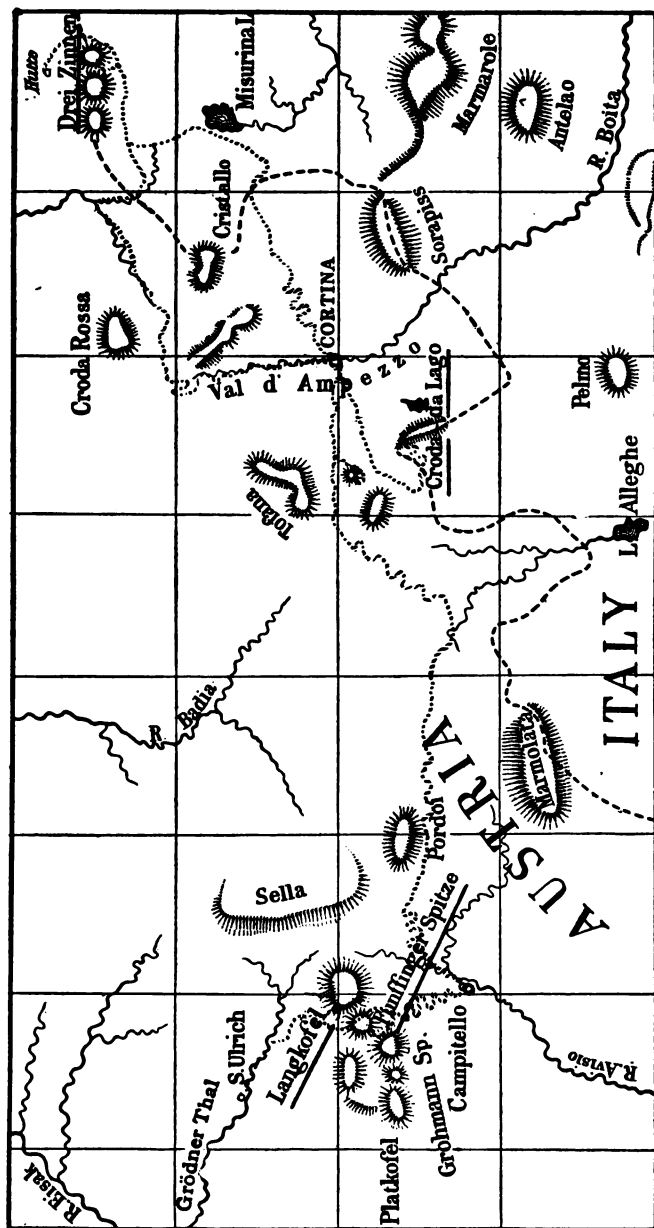
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SCALE. The parallels are 5 miles apart.

THE NORTHERN DOLOMITE REGION.

The red dotted line is the author's route.

I.

THE CRODA DA LAGO.

B



VIEW OF INNSBRUCK. FROM AN OLD PRINT, 1575.

THE DOLOMITES.

I.

THE CRODA¹ DA LAGO.

THE Dolomite country is best reached through the old capital of Tyrol—Maximilian's favourite city Innsbruck.

By taking a midday train from Innsbruck and journeying by the only railway which runs *over* the Alpine chain, the traveller will by way

¹ The term "croda" is applied by the Italian Tyrolese to designate an absolutely bare rocky ridge or mountain; while a hill with pines, heather, or other vegetation is denominated a "col," obviously from *collis*. The French apply the word "col" to a saddle or high pass between two hills, thus deriving probably from *collum* = neck. Forgetting this distinction may cause confusion. This mountain was formerly known as Piz Formin, and sometimes as Croda di Formin.

of the Brenner Pass reach Franzensfeste in time to get a glimpse of sunset effects upon the Dolomite rock. But it were better to start earlier and to get further, and, leaving the rail at Toblach, to post on through a romantic valley past the Dürrensee to Cortina.

Cortina, long known as a mountaineering centre, was to be my starting-point. It is set just where a fertile valley widens out into an amphitheatre some five miles across, which in turn is surrounded by a circle of snowy heights.

To the north Tofana towers up on one side, and Pomagagnon rears its jagged teeth on the other; next come the singularly squared blocks of Cristallo, then the more rugged crags of Sorapiss, and fair Antelao spreads its white mantle to the south.

But while all of these larger mountains have been often ascended and (except perhaps Sorapiss) present no difficulty to fourth-rate mountaineers, the lesser peak to the west—the Croda da Lago—ranks among the very hardest of those Dolomite ascents which are said to afford the most difficult of all rock-climbing.

Looked at during the hazy middle hours of the day, the Dolomites lose most of their charac-

teristics and all of their beauty. The gray dust of noon seems to have fallen upon everything, and to have levelled all things.

The mountains have lost their contour, the rocks their sharp outline, even the snow is no longer white, the sky is milky, the lights and shadows are gone, and the dark rock-pines are olives to the eye. But when the sun-rays slope at eventide, or, better still, when the flush of morning is in the air, then the valleys fall and the mountains rise, the purple shadows deepen, and then the Dolomite summits seem to drink in the rosy sunbeams and glow as if transfused with fire.

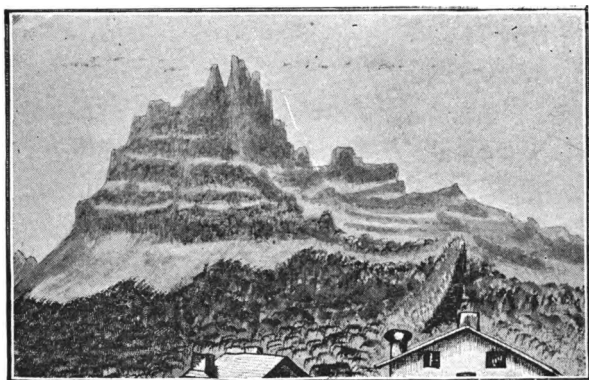
The Croda da Lago affords a specially striking view under these conditions ; but our business is with the mountaineering character of the peak rather than with its beauty.

This character may be gathered from the following extract ("Alpine Journal," vol. vi. p. 201):

"Among the many peaks and rocky forms around Cortina is one remarkable for its utter nakedness and uninviting aspect.

"This skeleton ridge, culminating in sharp teeth separated one from the other by deep

perpendicular cliffs, is named Piz Formin—sometimes Croda da Lago, from a pretty little lake which lies smilingly at the foot of its grim rocks. It is the highest point between the Pelmo and the triple Tofana, and has, I am told, attracted the attention of more than one mountaineer. Santo pronounced it quite impracti-



THE CRODA DA LAGO, FROM THE EAST.

cable last summer. From the Becco di Mezzo di," the same writer continues, "we had a good opportunity of surveying the Piz Formin, close to us; which survey, together with another we made from the lake . . . would seem to justify the opinion expressed by Santo as to its inaccessibility."

This opinion, notwithstanding repeated attempts to controvert it, remained justified for over ten years after it was printed.

The Croda da Lago strikingly resembles the comb of a cock. The two middle pinnacles rise far above the others, and are joined together for some distance up from their bases; of these the north peak is, however, the real summit.

On the Cortina side this pinnacle seems to be impracticable, on the other side it is undoubtedly so.

For many years attempts had been made to scale it by way of the fork between the two highest points; but this fork was for long unattainable. The famous local guides—Santo Siorpaes, Giuseppe Ghedina, and Pietro Dimai, all tried and failed; while the Swiss guides, trained to conquer long reaches of snow, accustomed to deal with cornice, crevasse, and other ice-dangers, could not compete with the Tyroler upon his own Dolomite rock.

However, in 1884, Baron Eötvös, with Michael Innerkofler (afterwards killed on Cristallo), succeeded in scaling it for the first time. Since then Austrian cragsmen have climbed it

about a dozen times, and a few Englishmen have followed.

One of the latter, a widely known mountaineer (W. W. Graham), writes, "I consider it the hardest piece of rock-work I have ever been on, as the difficulties are continuous."

This reputation is not suggested by the height of the mountain, and, fortunately for me, I was not aware of it beforehand, or, perhaps, this record had been unwritten. I merely knew that the Croda da Lago was considered to be unique for climbing purposes among the impressive crags which encircle Cortina, was placed first upon my list, and therefore was the one which ought to be taken.

Accordingly, with the help of Herr Ghedina, the obliging host of the Aquila Nera at Cortina, arrangements were made with one of the chief guides in the valley, who undertook to find a competent second. At 2 a.m. on a Tuesday in July, we (Antonio Constantini, Zangiacomì, and I) stepped out of the hotel into darkness and drizzling rain. Easily chilled in courage and body at that hour, we re-entered the building and waited half-an-hour, and then started again with prophecies of "*bel tempo*" later on. It was

so dark that I had to follow almost by touch, and once, losing sight of the head of my tall guide, I collided with a railing, which at the outset bounded the path. Crossing the torrent we kept a westerly course and trudged up hill through the drizzle for over an hour towards the Giau Pass. At 3.30 a.m. we left this path and plunged into the woods on our left, so as to walk round the northern end of the mountain and to make our first real attack from behind. Still verging to the left, in half-an-hour more we were climbing a steep spur, with our faces towards our starting-place. Some sharp zigzag ascending for another half-hour brought us up to the crest of this ridge and looking down over it at the village. For the rest of the ascent, save a bit near the summit, we were on the Cortina side of the mountain. A long slope towards the south across this face was then accomplished. On the way we touched our first bit of snow at 5 a.m., and traversed a slope of the same at 6 a.m. Near here a ptarmigan fluttered off in a suspicious manner, but we had not time to look for the nest. And I may now mention that on our return to this snow, we found that a chamois had passed over it, be-

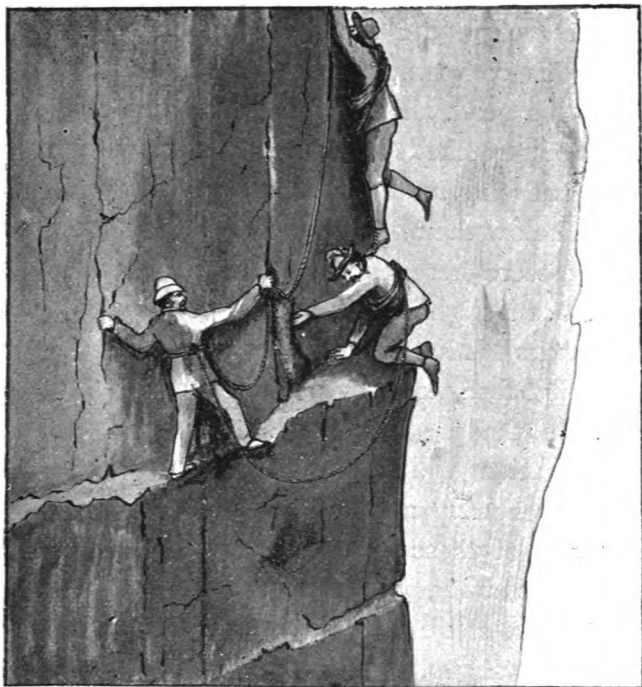
tween our ascent and descent, treading in our early tracks.

Soon after 6 a.m. we reached a point immediately under the "fork" to which our hopes aspired. The cliffs met here at a very obtuse angle, giving the idea of a corner, which carried its slight depression all the way up to the fork, some 2,000 feet of perpendicular height. Here the guides looked up, and muttered a few remarks I could not catch, or at least understand. But, as the cliffs appeared distinctly unscalable I concluded that they were merely looking at the two summits which towered up directly above our heads.

However, we passed this spot a hundred yards or so, and then found a wide ledge with an overhanging rock, where we breakfasted, having done nearly four hours of hard work, equal to over sixteen miles upon level ground.

Having rested twenty minutes, the guides proceeded to strip themselves of everything but their clothes. Pack, provisions, ice-axes, even boots were laid aside, and "scarpette," a kind of boots with pointed toe and hempen sole (called in Spain "alpargatas;" in France "espadrilles;"), were tied on, and, trusting to these and our

fingers, with two long ropes, we began the real climb by taking "a traverse" (or narrow ledge) which led us back diagonally at a higher



"I KNEW THE WORK HAD BEGUN."

level than our former path, until we reached a certain point, in the corner before mentioned, and 100 feet above the spot whence we had

seen the fork and summits. The "traverse" was not difficult nor easy: but when I saw one guide clinging to the ledge and stooping, while the other, straining upwards, spreading his body to the face of the rock, was gradually hoisted upon his companion's shoulders and ultimately on to his head, all the while both men clinging with outstretched arms to the cliff, with little hold, and one hundred feet of space to the next ledge below them, I knew the work had begun. There were here, as was said before, two cliffs joined at a slight angle, both as perpendicular as any rocks I have seen. We were climbing the left-hand face, not far from the corner. All the way up the precipice there was a perceptible stratification which was horizontal, each belt being generally about twenty feet thick. The joinings of these belts were rarely of any use to the climber, every projecting ledge being exposed to stone showers from all the 2,000 feet of rock above, and consequently they had been worn smooth and rounded down. But here and there a flake of limestone, from half an inch to three inches thick, perhaps, had recently peeled partly off, and the notch gave finger grasp; or a fossil had crumbled out and

left a hole into which the hemp-soled shoes fitted firmly. Had there been thousands of these helps instead of hundreds, the ascent would have been easy enough; but as they were few and far between, every other less suitable form of hold had to be utilized. A simple crack, into which an inch of the fingers could be thrust, if horizontal, was a good hold, if perpendicular a painful one, but one which served. Sometimes a blunt depression, like those to be seen in the stuffed back of an arm-chair, would have a roughened slope where it was sheltered from stone-fall; this suited both the fingers and the "scarpette," but was not a help in which to place much confidence; for rock climbing, although venturesome, should be sure, no good hold being relinquished until another is found. At times our upward course deviated towards the corner, where the turn of the right-hand cliff offered a purchase to one hand or foot, thus helping the thrust of the other against our own rock-face. But this was not often the case, for the angle was so obtuse as to leave both cliffs in a line in places. Occasionally, by some fault of stratification, a hole, very much like a dog-kennel in size and shape, appeared

at the junction of these two cliffs. Into these holes I was invariably ordered by the guides, with the recommendation that it was "firma loca."¹



A "FIRMA LOCA."

At first I sat with legs dangling and head out, but this would not suit them, so I had to curl up, like a fossil in its matrix, while the

¹ Spelling not guaranteed : the Italian is "Luogo Fermo."

leading guide, with forty feet of rope, explored his way up to the next fair hold ; the second guide, firmly fixed at the mouth of the hole, kept paying out the rope carefully, with an eye to a possible slip and a consequent fall and a jerk from his leading companion.

The first man having reached a " *firma loca*," calls out " *Avanti !*" and as best I can I mount after him ; but if the tourist could not climb with ease, I believe the guide would help him with the rope. It destroys all the pleasure of climbing to have this done, and I insisted upon doing my own work all the way. But the knowledge that the rope, firmly fastened round my chest, was held at the upper end by a man who was a model of agile manly strength, gave the sense of security without which no one ought to trust to chance grips of rock at that height.

This guide was the handsomest Italian I had yet seen. About twenty-three or twenty-five years old, just under six feet high, with broad shoulders, slim waist, very muscular limbs, he had the face of a dark Adonis, the features all well formed, even refined, flashing dark eyes, and a black full moustache which curled back

nearly to his ears. The second guide was strong and cheerful. He was at the end of the second rope, and of course followed me. Thus we slowly crawled upwards, continually lengthening and shortening our line like some thin "looper" caterpillar eighty feet long, with a knob at each end and one in the middle. More than once the course of the leader deviated to the left of what may be termed the plumb-line of ascent, or to the right of it.

On such occasions I had to climb diagonally too; and while he held the line, not directly above me but at a higher point aslant, the other guide from a "*firma loca*" dealt out his rope, so that if I had slipped or lost hold of the rock I should have been suspended between the two guides.

This obviated the danger of swinging far along the cliff, which would have been my lot in case of a slip without the horizontal stay which the second rope afforded. It would be no joke to play the part of a long pendulum grating across the hard bosom of that limestone precipice. Their admirable arrangements prevented the risk of this, and it could be easily seen that they had provided for every possible piece of

bungling and failure on the part of the tourist, which is consoling if not flattering.

There were times, however, when no friendly cave was within reach : at such places the tourist was told to hold fast where he was. And then, with breast to the rock, with both arms stretched out, and fingers clutching where he can, with the weight of the body generally on one toe, or, if happily there be room, on both feet, he clings, spread-eagle fashion, while another rope's length of critical work above is covered by the leader. At some of these halting perches the second guide came up below, and, if he had a good hold, placed a spare hand to the amateur's straining foot. It is rather more trying to the nerves to wait thus than to keep moving. I felt the cool rock pressed to my cheek, and the contact turned the train of my thought from physical activity to mental reflection ; and I realized my isolated position as a tiny insect perched midway up that vast wall, with half the sky cut off above, and an unthinkable abyss sinking far below. I have been told that at such moments travellers have felt uneasy, and I do not doubt it.

But the guides were always on the watch for

the tourist's weaknesses, and probably very few accidents on rock-mountains are initiated by him. His slips are anticipated and his falls are checked at the first inch or so. On the other hand, I wished I had been as certain of the guide's prehensile infallibility as they appeared to be regarding each other's.

My attempts to hook a bight of rope over a little rock-point while the guides were moving were on this excursion reprobated. It was enough for me to remain "*fermo*," and in their opinion the danger was lest the *tourist* should slip *while* they were moving, and not that they might slip and so need support from him. I must confess that my apprehensions were exactly the contrary to theirs.

It was very interesting to notice how cleverly these men utilized every form of irregularity in the rock-surface. Sometimes a kind of buttress projecting an inch or two, but rounded, would offer no better hold than a kind of bevelled edge on each side. These edges would be one or two inches deep and two or three feet apart: one of these sides alone would be useless, but by grasping both together and hugging the buttress between the extended hands a grip was

obtained and held until a foot could find a point or chink higher up, and then the body being raised, the hands were put within reach of a better hold.

One great help came from the fossils; one kind (a Trigonion, I believe) being fairly plentiful; it is in shape somewhat like a large three-cornered mussel, but not a bivalve. These relics of a distant age left holes of a triangular shape some two and a half inches across, and the rock throughout being limestone, with, I think, an infusion of iron, was hard, tough, and (on this sunless side) reliable. Anything which the tips of fingers or shoes could grip was strong enough to support the weight of a man, except near the summit, where the material was more friable.

No one had been up this year, but my guide had made the ascent twice last year, and seemed to follow an accepted route. The greatest marvel to me is the discovery of any route at all, for the surface of rock is so vast, about half a mile wide and about six times as high as the highest cathedral towers in England, that days and years might be spent exploring in vain such a huge tract of precipice, which appears all alike

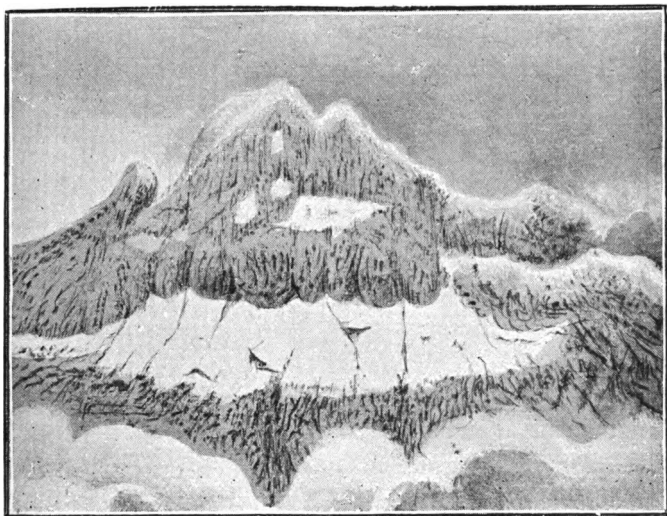
smooth and impracticable both from below and from above. After nearly two hours of this hand-over-hand clambering we reached a fairly secure resting-place, where I demanded a halt for breath. This was the long-desired fork or saddle between the two peaks. It was a narrow ridge of jagged rock like a rough thin wall joining two pinnacles. With a back against one tower, and a leg each side of the ridge, one had leisure to survey the scene. On the left or western side the Nivolau first arrested attention, a perfect specimen of what is called the "Writing-desk" formation of mountain, and further south the Civetta, with its Gothic tracery and airy lace-like curtain of snow, peeped fitfully through the rolling sea of clouds.

Pelmo with its massive brow was behind us out of sight, and, alas ! only partial gleams of a vast snow-slope revealed the position of Marmolata. Immediately before us the view was blocked by the spire-like peak which was to be our summit.

But on the eastern side the sky was clear, and we saw not only the bright dots which showed where the dwellings of Cortina clustered, but far beyond, over the Tre Croci Pass, the Drei Zinnen lifted their unmistakable towers.

These views alone would be in fair weather ample rewards for our labour.

But soon we had to be up and climbing, and after we had easily threaded the narrow connecting ridge, the final spire was tackled with



MONTE CIVETTA, FROM THE CRODA DA LAGO.

confidence. Once more we gradually changed our face, and curling upward to the left soon reached the western side of the peak, and had it between us and the Ampezzo Valley. On this face the rocks were very rotten and so

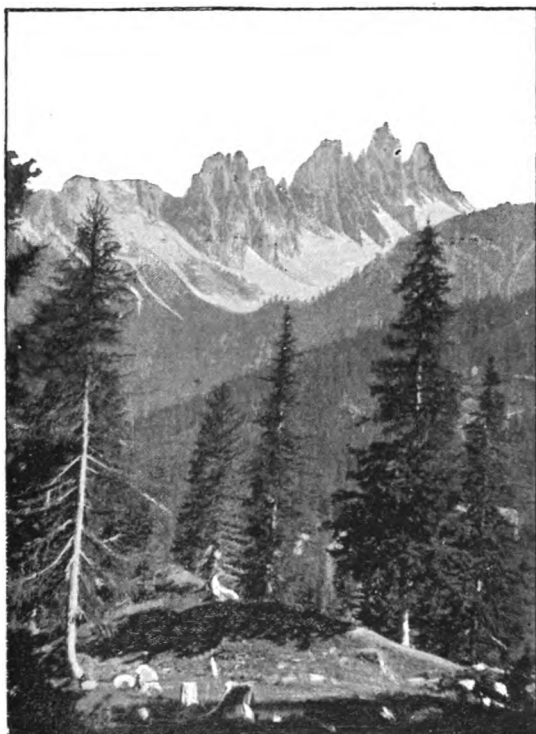
much broken up that the guide moved very cautiously, carefully testing every block before trusting his weight to it. The view, taken from a distant photograph, gives us as usual a poor idea of both height and perpendicularity, but somewhat fairly represents the craggy wildness of this side.

The climbing, however, was not difficult, the rough masses offering any amount of hold, but of a more or less treacherous character. We did not dislodge any stones, and so avoided the danger of stunning the man below us on the rope, a cause probably of some of the fatal accidents on rock-mountains which have never been accounted for.

It was about half-past eight when we finally emerged upon the summit. I say emerged because it is the only word which expresses the sensation felt when, after hours of close contact with the huge mass of a mountain, one suddenly finds light and space all around and beneath.

Here we rested, enjoying the beatific sense of satisfaction which always comes with fatigue, achievement, and an ample horizon. The summit resembles a spire broken off, leaving a top of some thirty square yards, rough and uneven,

but fairly level all over. Oftentimes there is a frugal mountain-feast to be enjoyed on a



THE CRODA DA LAGO, VIEW FROM THE NORTH-WEST.

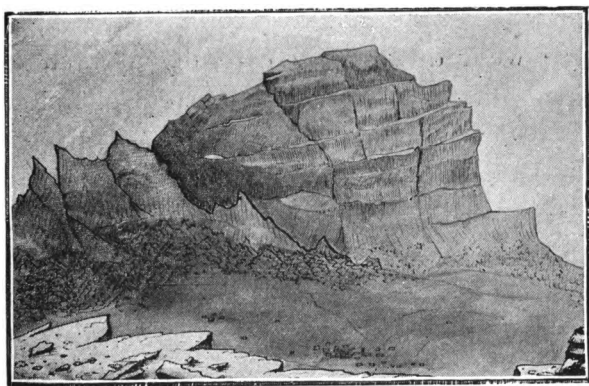
summit, but we had brought no provisions ; the view was the only refreshment, and the eyes alone drank their fill. On the eastern side the

clouds were few and high, but on the south and west all was obscured by a tumultuous abyss of heaving vapour, rolling billows of dark mist.

Tofana to the north was half-veiled, and reminded one of that marvellous picture of this mighty peak by Elijah Walton. To the south Pelmo stood, an upright and flat-topped bastion of rock, like the rounded keep of some Titanic castle rising 6,000 feet nearly straight up from its base. The outlet of the valley with Monte Duranno came next, then the weird but beautiful Antelao, a sheeted ghost, or as some will have it, a white-veiled bride. Its sloping shoulders topped with a strangely-turned neck and small uplifted head, give it a form of grace never to be forgotten, and one which adorns the background of more than one of Titian's masterpieces. Pieve di Cadore, his birthplace, is almost in view round a buttress of this singularly romantic mountain.

But the most imposing peaks from this point were Sorapiss, craggy, and rough, and snow-blotted ; and Cristallo, a magnificent pile of massive blocks seemingly squared and laid horizontally in tiers, each block, however, being about 1,000 feet long and perhaps 500 high.

After half-an-hour's gazing at the panorama and another ten minutes spent in selecting a characteristic stone from the blunted summit and gathering the gay yellow blossom of a poppy (*Papaver Alpinum*) which, *mirabile dictu*, had found a sheltered cleft, and sunshine enough



CRISTALLO, FROM THE CRODA DA LAGO.

to enable it to bloom on this elevated crag, we began the descent.

Knowing that nine out of ten mountain accidents occur in the descent, I thought it wise to suggest caution by every means I knew, and every proverb I could quote in Italian. The result was rather to unnerve the guides than to stimulate their caution ; and I have since formed

the opinion that with people of their race and training, the best plan is to leave them mentally undisturbed. A call for extra care, if it make any impression at all, tends to produce panic. And I have been assured that few races possess the calmness which can strain every nerve to make things "dead sure" and remain unperturbed as can the Anglo-Saxon.

We went down very carefully at first, but a cloud gathering round the crest of our mountain and shedding a few drops of sleet so alarmed Constantini that he called for haste, lest, the rocks getting glazed, the harder parts of the descent should become doubly hazardous. The only unpleasant consequence was that I had to submit to a great deal of lowering down over precipitous stretches of rock, which ordinarily would have been circumvented, and, to save time, one became for the nonce a piece of goods. Although easier on the whole, the descent was in one respect more perilous to the party than the ascent. The chief guide was now last, and, while his hold upon the rope assured our safe retreat, he had to trust to himself alone.

But, fortunately, they have a method of using

a loose rope doubled over a firm point; the guide descends over both ends, and when a "firma loca" is reached he slips one end and hauls at the other until the rope is freed. If needed, the performance is repeated upon a lower projection and so on; with the aid of this device we all came down in safety.

The whole of the upper part of this mountain was entirely free from snow. And as the cliff we chose was turned northwards, the denudation must be the result of the steepness of the face and not of the action of the sun.

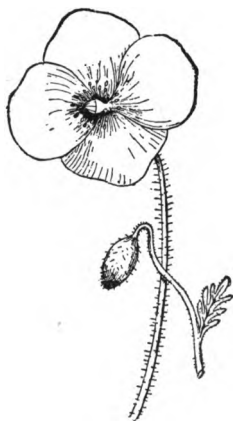
To close this record it is enough to add that in a hurried manner we reached the comparative safety of the friendly "traverse." Thence an easy crawl led to the broad ledge and cave where "Rück-sacks," etc., awaited us. Our course from this point was simple.

After a slight meal and a few snap-shots with the Kodak, we resumed our serpentine way, down over rocky spur and through the fragrant pinewoods, reaching Cortina at about 3 p.m. without anything to note save the fresh tracks of the chamois aforesaid.

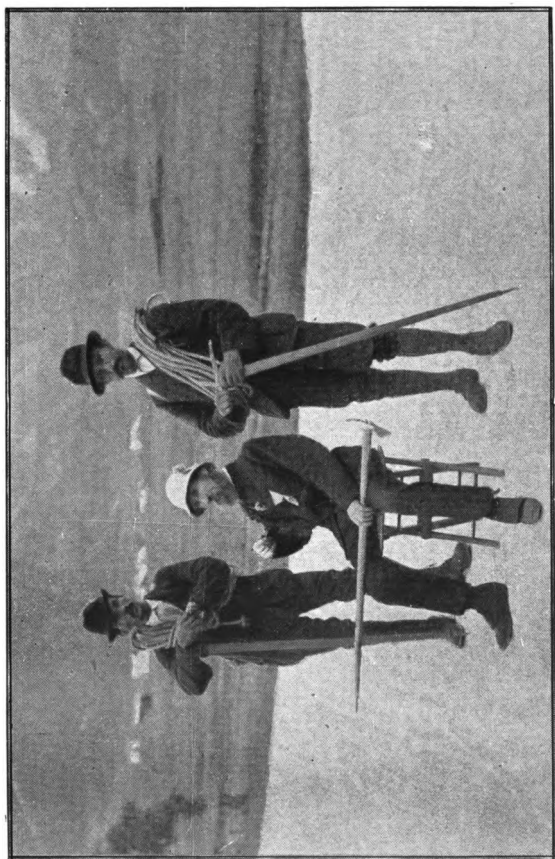
I found on arrival at the hotel that the visitors who were previously as uninstructed as

the writer, had now learned the reputation of our mountain and, in fact, had heard of grim difficulties and hazardous points which my experience had not yet discovered.

Our welcome was a warm one, no less from the friendly landlord and all the staff of the hotel, than from our own countrymen and women. One of the latter brought forth a camera and "took" the rather jaded party with results declared to be satisfactory.



PAPAVER ALPINUM (YELLOW).



ZANGIACOMI, CONSTANTINI AND THE AUTHOR.

II.
TO THE DREI ZINNEN.

II.

TO THE DREI ZINNEN.

THE next mountains on my list were the Great and the Little Zinnen.

The chamois shooting season having commenced, Herr Cesare Ghedina kindly equipped me for and inducted me to the sport. Nor did this appear in the hotel bill.

Although no horns were taken, the pursuit brought me into better training and we prepared to deal with the Zinnen. Of these, the Little Zinne had such a reputation that we felt reluctantly obliged to give it up and to confine our attempts to the others. Nor did we feel ashamed of this discretion. The name was first mentioned to me in France by an English mountaineer of great experience, who said: "the most difficult mountain in Tyrol is the Little Zinne."

The natives of Cortina and the climbing visitors thereto looked upon it with the mysterious awe that an unknown ascent always imposes upon ignorance.

In 1879, Zsigmondy, whose daring and successful career found an unfortunate end at the early age of twenty-four, on a precipice of the Meije, was climbing the Great Zinne with Michael Innerkofler, when they were struck by what he calls "the church tower" of the Little Zinne, and the guide said, "if you had wings you might climb it."

But two years afterwards, in 1881, this same guide, the most venturesome of three enterprising brothers, actually found a way to the top.

In that year he led up Herr Diamantidi who was thus the first amateur to reach the summit.

In the year 1884 the ascent was made by Zsigmondy and three friends, who took three hours and a half in scaling the rocks.

I did not see his account until after returning to England, but rumours abounded in Cortina.

There was a "Traverse" of fearful renown.

There was an "overhanging camino" near the top, where the amateur could have no help from the guide.

Several members of the Alpine Club (English) passed it by while I was at Cortina, and while here, Joseph Imboden (whose praise is in more than one number of the Alpine Journal) confided to me as an established belief that the Little Zinne was harder than any mountain in Switzerland.

This statement from a guide of his reputation, a Swiss, a native of the district comprising the Rothhorn, Weisshorn, Dent Blanche, etc., seemed to me sufficient to settle the question; so we started for the Grosse Zinne.

To reach this we had to pass from Austrian territory at Cortina, through Italian rule around Lake Misurina, into Austria once more beyond our mountains. For the peaks of the three Zinnen like the crags of the Croda da Lago, form the untrodden boundary between Italy and Austria.

The whole distance from Cortina is about thirteen miles as the crow flies, the hills and windings would bring this up to over twenty miles, and the "Hütte," where we hoped to pass

the night, was in German territory three or four miles beyond the nearest of the Drei Zinnen.

Such a preliminary to a stiff mountain climb was rather too much, but Herr Ghedina was ready with an "Einspänner" of remarkable form fitted to go wherever a horse could scramble. This vehicle had a long narrow strong body, like the superannuated rattle-traps of the Zermatt valley, was mounted on four low stout wheels and of course there were no springs. The jolting is indescribable, two thick rugs, folded up small, made apparently little difference to the discomfort.

The Tre Croci road, so far as there was a road, was a miniature representation in high relief of the more mountainous portions of Tyrol. This drive of some eight miles to the Misurina Lake (famous for trout) was, with one exception to come, the roughest jolting of my experience.

From the quiet hotel at this lake the Einspänner returned (whole, I believe), while Constantini and I travelled on foot through pine forest, juniper scrub and alps, towards the mountains. Just before the "grava" of the nearest (unimportant and western) peak was

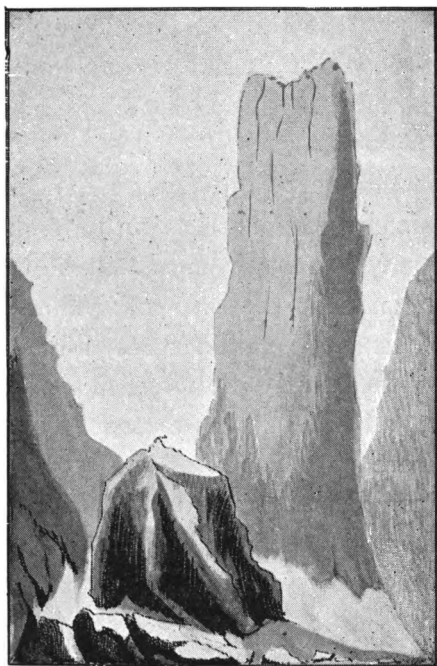
reached, I was cheered by the sight of vast quantities of the graceful *Primula Longiflora* in full bloom. This *Primula*, remarkable for the length of the tube of the flower, is getting rare in the Alps, I know only one habitat in Switzerland, a good day's excursion from Zermatt.

We passed on to the "grava" and traversed the whole length of the southern side of it, crossing several narrow snow-slopes on the way. This magnificent expanse of what is in the north of England called scree, forms a fitting plinth to the three mighty peaks which tower above it, and have supplied its materials. The stones were of all sizes and, like their parent mountains, of strange shapes, many showed traces of organic structure, and I secured several specimens of the Trigonion and a bivalve or two, with others.

When nearly opposite the Little Zinne its appearance was so striking, that we paused while I committed its aspect to paper.

From no other point of view (except high up on the side of the Grosse Zinne) does this tower-like peak stand so clear of its surrounding pinnacles, and when the guide assured me

that the ascents had been made from the very side we were gazing at, I did not wonder at its



THE LITTLE ZINNE. FROM THE GRAVA. SOUTH-WEST.

reputation, nor did I regret that we had no designs upon it.

While I was sketching, Constantini amused himself with the splendid echoes from the cliffs

on the east, those, I believe of the Zwölferkofel. Six or eight successive echoes were distinctly heard. Resuming our scramble the Hütte on the Sextener Platte was reached well before sunset. The erection and maintenance of these sleeping-places on the mountains is entirely the contribution of the Continental Alpine clubs to mountaineering.

The members of these clubs need not climb a foot above the floor of their hotel bedroom to be qualified for membership, but there is a money payment, which secures to the payer the prestige of the club towards limiting his hotel charges, and enough is collected to build and repair the shelters for those who do climb; and we owe them a debt of gratitude for this service. Of course these clubs reckon their members by thousands, almost every travelling German being able to write the mystic letters after his name in the visitor's book.¹

Although there are climbers—German, Italian, and French—equal to any in Britain or Greater

¹ Although of more recent foundation, the Continental Clubs for the Alps alone number 41,420 members, as against the English Alpine Club with 475.—*The Pioneers of the Alps*, p. 21 (1888).

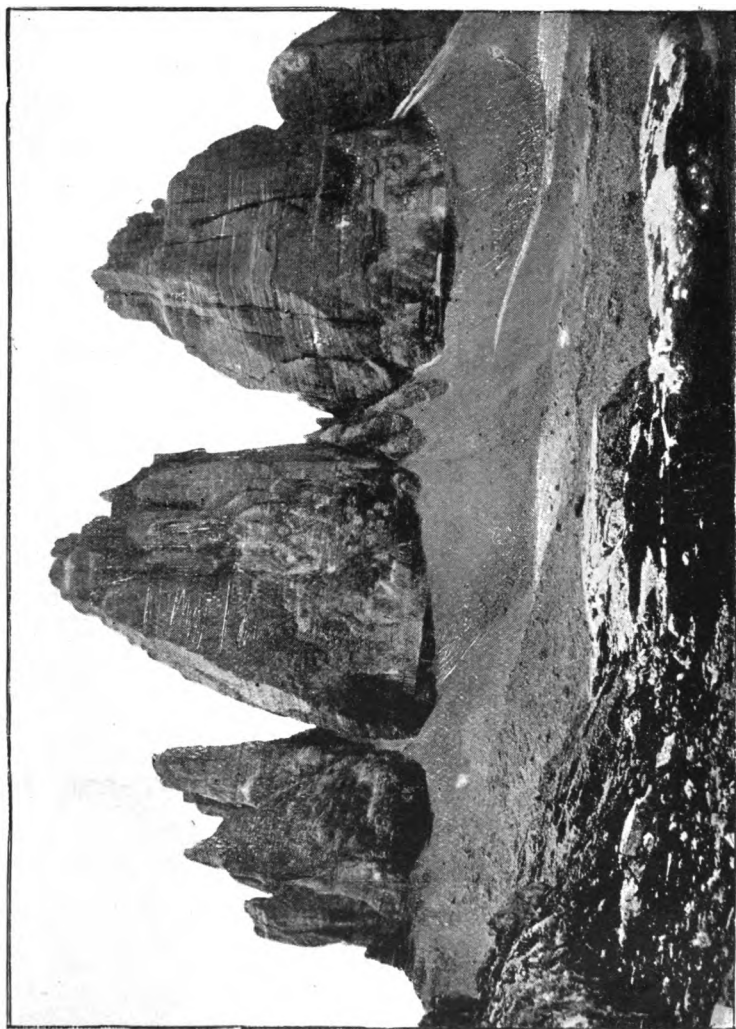
Britain, they are swamped by the numbers who turn their clubs into tourist's societies.

The "Alpine Club" (English) is of a different nature so far, and perhaps is justified in retaining its old name until a club sufficiently similar in character and qualifications shall arise as to make the distinctive national adjective necessary; or until—*absit omen*—its qualifications are allowed to be further reduced by the relative ease of modern mountaineering.

The Hütte on the Sextener Platte to the north of the Zinnen is well-fitted and well placed, it commands a splendid view, especially at sunset, of the three remarkable peaks. But the altitude, with snow around, made the temperature too low to be pleasant.

After fetching the water and lighting the stove we enjoyed our supper, and were preparing to turn in between the thick rugs for the night, when a loud knock at the door announced the arrival of another party, who had come up fresh and strong from the village below. It consisted of a young German from Frankfurt, and a guide, Franz Innerkofler, of Landro.

Of course they took another hour to refresh



THE DREI ZINNEN.
(From the Sextener Platte, North Side.)

and then another hour to let their tongues run down, while their tobacco gave a new atmosphere to the small abode. The Herr was a good fellow nevertheless and Constantini was glad to meet Innerkofler, who had ascended the Little Zinne more than once. To our



IN THE HÜTTE, 2 A.M., PREPARING BREAKFAST.

surprise the new party announced their intention of attacking that mountain the next morning.

After the broken doze which I believe usually passes for sleep in an Alpine hut, we rose at two a.m., breakfasted by candle-light, and

before three o'clock the other party had started for the mountains.

At 3.20 we followed, taking the path by which we had travelled hither the day before. But the snow on the "grava," then soft and slushy, was now crisp and hard like frosted marble beneath our feet. The air was buoyant and bracing, and, as we topped the eastern shoulder to reach the south side of the mountains, the glorious "daffodil sky" of the dawn gave almost inspiration, and seemed to diffuse a warm glow through all nature, including ourselves.

One subject had haunted my dreams and occupied my thoughts ever since the previous evening; and now when we overtook our companions of the night, and the tourist cheerily asked us why we did not try the Kleine Zinne, it found expression.

If this good young man from Frankfort could sally forth with a light heart to tackle the Little Zinne, why need we feel so despondent as to decline even the attempt? He did not seem to be especially endowed, either physically or mentally, for achieving the unpermissible, nor could his term of experience promise any unique climbing ability.

He was about my own height, but, being round instead of square, weighed probably eleven stone.

The upshot was that I proposed to Constantini to try the Little Zinne, and he as readily assented, the other party welcoming the idea.

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III.
THE KLEINE ZINNE.

III.

THE KLEINE ZINNE.

MARCHING all four in single file, we made our way up the "grava" slope and round the southern base of the Little Zinne until we got fairly into the cleft which separates that mountain from its nearest neighbour the Great Zinne, which is the middle peak of the three. Here there was thick snow, the steep sides of both mountains effectually keeping off the sunshine. Ascending this steep snow-couloir until it ceased, where the cliffs on each side formed a junction, we deposited our packs and ice-axes, put on the "scarpette," and roped up two and two.

Innerkofler then led the way, and caused some amusement, when attempting too carelessly to surmount the first shelf, by falling back upon the snow.

This, however, was his only mistake; I never

saw a better cragsman at work. Tall, square-shouldered, sinewy rather than muscular, big-jointed, with long arms and large hands, he seemed to glide up the face of the rock with simian ease and silence.

There was no indecision, no mishold, no stone dislodged, and he possessed such marvellous breathing power, that on reaching a fair foothold he promptly turned and began to haul at the rope without pause or hesitation. I soon understood the confidence with which my fellow-tourist essayed the ascent before us. It should be said that he had a reason for being hurried up in this fashion, they were desirous of accomplishing both Little and Great Zinnen that day. Innerkofler having undertaken the contract was determined to carry it (and the "Herr" too, if needful) through.

There appears to be a belief that the English alone have courage up to the point of foolhardiness in the mountains; my experience leads me to think that (of late years at least) greater risks are run and less justifiable enterprises are attempted by the Germans and the Swiss. The records of fatality in such exploits, since the famous Matterhorn accident in 1865, fully bear

out this opinion. Parties without guides, and individuals who have neither knack nor experience, go forth to the boldest of deeds, and only when a catastrophe occurs do we recognise



CONSTANTINI LEADS TO THE
RIGHT.

that they have heedlessly imperilled the lives of themselves and others. Let such audacity be reserved for the safer slopes of snow-mountains, which in fine weather need little more in the amateur than endurance. But leave the steep rock to those who, at least, can cling on their own account, and who know that a mistake, a mishap, an inattention, a blunder

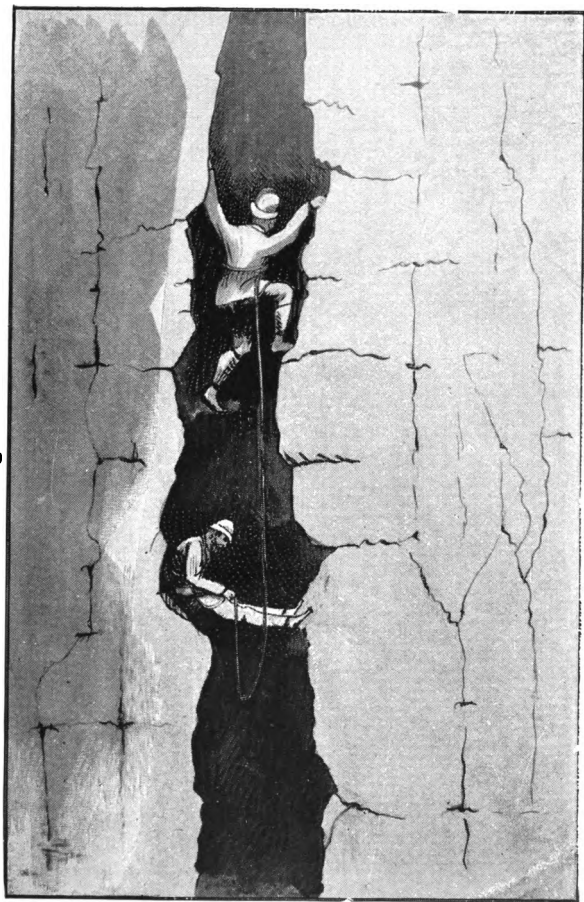
of any kind at any point of the work must be fatal, *unless the stationary man is prepared and able to support the weight of both.*

The earlier portion of our ascent was tolerably rough work but not difficult, the hold was

good and the cliff irregular. Our course trended to the right at first and then went straight up for a long distance.

Like all Dolomite climbing, the way led through innumerable "caminos" or chimneys, upright clefts which indicate the line of cleavage at right angles to the stratification, which last is always horizontal. Usually these perpendicular chasms are wide enough to admit a man, or wider. They often have rough knobs and holes untouched by, because screened from, the stonefall from the brow above; an agent which planes down every exposed surface on the more open mountain wall. These irregularities, with small fissures and faults, afford good grip for the hands and sometimes, though of less importance, for the feet as well. Progress upwards under such conditions is rapid, limited only by lung requirements.

Occasionally both sides of the camino are smooth for some yards up. The guide then (also the tourist if he can) puts his back to one side and feet to the other and works himself up to a better hold. In one camino just here the cleft narrowed up and almost closed. But Constantini was not to be denied. The two



A CAMINO.

edges of the slit were not quite in a plane, one side standing out much further than the other. If the reader imagines a tall block standing a few inches out from a wall, it will give an idea of the position. The guide accordingly forced his fingers into the crack, and leaning back thrust his feet against the more projecting lip on the other side of it, and so got a purchase by which he clambered up to the safer part above. Adopting this device I followed, not however without a little encouragement from the rope.

At a good height we took a "traverse," *i.e.*, a more or less horizontal passage across the face of the mountain. With our chests to the rock this led to the left; *i.e.* westwards.

This traverse was by no means easy. The strata did not help us, for the only available way was an uneven and undulating course over a smooth slope like a narrow half-roof.

This difficult bit illustrated the most troublesome feature of the many Dolomite peaks which stand nearly erect and rise to a great height. They have been for ages swept from top to base by an intermittent but repeated cannonade of broken rock. A view of the vast accumula-

tion of detritus called "grava," will give an idea of the magnitude of this operation.

Consequently any and every part not protected by an overhanging brow is rounded off and polished, and offers absolutely no vantage-point of attachment.

A place like this could be attempted only with a rope, held, as ours was, by a watchful companion stationed on firmer foothold at the beginning or end of it.

Following this came another camino, a long one and a very irregular one, full of interesting features from a climber's point of view, but with nothing of either difficulty or danger.

We now found ourselves upon a gigantic buttress which had not revealed its existence before: it stretched out in a S.W. direction immediately towards the point whence my sketch had been taken on the "grava" the previous evening. The great height had deceived the eye, and the distance had merged the shoulder into the cliff above.

Here the guides called a rest, and we sat down to slight refreshment, loosing off the ropes.

I understood from the talk that a critical passage was next at hand, and when Innerkofler prepared to resume the way I noticed with great surprise that the rope was not tied around his body. Knowing this to be contrary to the Alpine code I at once called his patron's attention to the fact. He did not at first comprehend the point, and as we spoke in English, which neither of the guides understood, I ventured to explain. For myself I had determined not to advance a yard unless the rope was secured to the bodies of both my guide and myself. The German then told his guide the purport of my remarks and asked him to tie the rope. I must do Innerkofler the justice to say that he acquiesced without any demur, and, at the risk of being thought heretical, I will further say to his credit that I believe the next piece of our climb, as an exception to every other place I have seen or heard of, ought to be taken without the rope or, preferably, not taken at all.

This unique bit of work is "The Little Zinne Traverse" we had heard so much of. It is a horizontal ledge, running to our left as we face the rock, following the line of a stratum

which had been softer than the layers above and below, and, perishing, had left a groove which ran at a fair level around a considerable portion of the mountain. There is, I understand, a similar effect of the unequal weathering of strata on Mount Pelmo, but the ledge there is, I am informed, much longer and very much broader.

On the "Little Zinne Traverse" the ledge seemed to me to be 100 yards long going, and 50 yards returning; let it go at the latter. The cliff above slightly overhung it, and, in fact, had protected the shelf. The drop from the edge was absolutely perpendicular, and the distance nearly 2,000 feet.

Of the breadth I am more certain, it averaged from nine to fifteen inches wide on the flat. This, of course, would be six inches more than any rock climber would need if there had been any handhold.

But there was *absolutely no safe hand-grip* from end to end. The weathering had hollowed out the cliff which was generally of an even concave sweep, and the surfaces were all smooth and rounded out.

At two points the overhanging projection

came down so low that one had to bend down to avoid it.

Yet the easy level of the path so plainly marked seemed to make it so simple that only by reflection can the full character of this long ledge be estimated; and many may pass over it without a thought of peril until some day of sad awakening.

Zsigmondy describes it as a "narrow rock-sill" (*Felsgesimse*), and mentioned that "the inside wall lifted itself horribly smooth and perpendicular, while here and there in the splits of the cliff were lumps of ice." But he does not seem to me to draw the clear distinction between *danger* and *difficulty* which mountaineering requires.

The main feature of the place was not so much the apparent difficulty of threading it, as the long continued risk from the lengthened exposure to the perils of such a way. Dangers which could not be provided against by the rope.

The ledge could not be crawled over, it was too long, and at places too narrow to allow for the width of the shoulders.

Its length precluded the possibility of using

the shelf like a Telfer-wire for the elbows and arms, while the body hung over the edge.

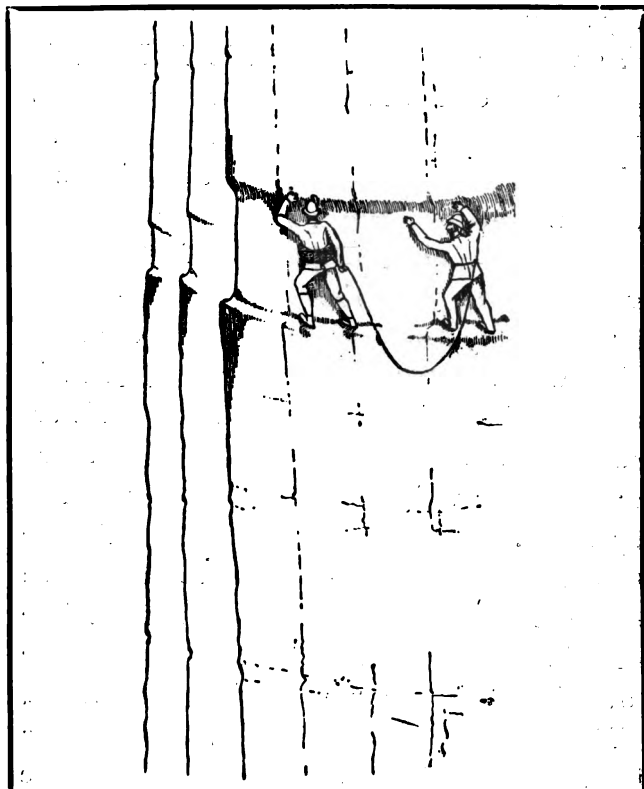
Worst of all the smoothness was so unbroken all the way that no "firma loca" could be chosen as a halting place whence the rope could be manipulated.

So we turned chest to the rock, and spreading out our arms edged along sideways, feeling our way but not able to grasp anything. This was very much more than I had bargained for. In the whole of my experience on Dolomites this is the only passage that I should be unwilling to try again. Tastes will differ, but it seemed to me that in such a place no man can help his brother. The best of cragsmen can but hold his own while he keeps his balance, and he has nothing to spare at the best; a slipping foot, or a swimming head, or an uncertain eye, would settle the case of its possessor, and of his companions if roped to him.

There is only one thing which can bring that traverse within the range of true (that is, safe) mountaineering, and that is a long rope or wire hand-rail fixed to iron bolts driven into the solid rock.

This, however, is a kind of device from which,

unlike the Matterhorn, Meije, Dru, etc., the Dolomites are happily free.



THE "LITTLE ZINNE TRAVERSE"
(SHOWING HOW NOT TO USE THE ROPE).

However, we passed the traverse, and were soon swarming up another camino, and then

the way next took us over miscellaneous rock-work where the going was hard and the rock very steep.

As was the case on the Croda da Lago, the upper parts of the mountain were less smooth, softer, and more broken up than those below.

The greatest care was needed to avoid trusting to a moveable block, and still more petty caution was required to guard against starting smaller stones. This shows the danger of more than one party being on the mountain at once.

We who brought up the rear were often in danger and continually in anxiety on this account; but the steepness of the mountain saved us; anything which fell usually fell out clear beyond us. However, as the others led in the descent, we had our involuntary revenge when on one occasion one of us, treading where a little "scree" seemed safely lodged, sent down a double "over," fortunately a "maiden" and no wicket.

We were now nearing the top, and already a cleft was in sight which separated a side pinnacle from the summit. We at last attained the neighbourhood of this fork, and upon a small "platte" (or wide ledge) we once more rested.

The cliff above this "platte" rose up quite .

straight, but at one end of the ledge a kind of cave with a tall narrow entrance ran into the rock. The height was perhaps twenty feet from the shelf to the top of the cave, and there, forming a kind of lintel to the opening, a massive slab of rock had stuck. It rested like a gigantic chimney-breast above a huge old-fashioned fire-place.

This was the chief difficulty of the ascent, and we had realized its importance even before Innerkofler told us that it was "The Camino."

After resting awhile he got up, and entering the "fireplace," began climbing the back of the chimney.

Clinging in some way to the roof of it he came out again under the breast. Here he hung, taking breath and feeling for his next grip. Thence reaching up near one edge of the slab he managed somehow to get a crevice for the fingers of one hand, and suddenly with an agile jerk of the body he got outside, and then spread himself across the wide face of the slab, got another hold, and so up to the easier but not easy piece of work above.

This followed a slight groove straight up the

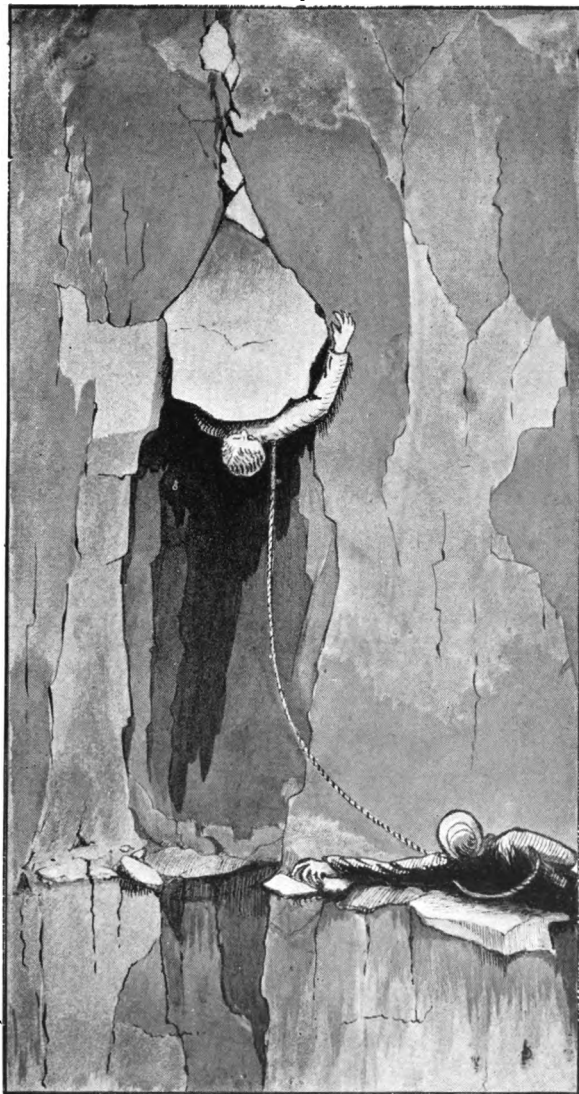
rock, which took him twenty yards or so over a bend, out of sight from our shelf below, before he could find foothold to turn round and shout "Vorwärts."

My guide and I had watched with the keenest interest every movement, and noted every inch, as it were, of his strenuous progress. But I must confess I had a very vague idea of how it was done.

My fellow tourist now made the attempt, but whether from inattention to the details, or inexperience of rock, or slowness of habit, or what else I know not, he had not tucked himself fairly up into the roof of the cavern before the guide above, of course ignorant of his position, began a steady haul upon the rope. And inasmuch as this rope had actually to descend from the amateur's body to run out under the great slab, the effect was most unexpected and peculiar.

The young German was plucked out of his hiding-place, and swinging out far beyond us, remained in a state of suspense gently oscillating and revolving in space.

Innerkofler had a good purchase above, and probably guessing the state of affairs,



THE CHIMNEY-BREAST ON THE LITTLE ZINNE.

continued his hauling. In time, after a few jerks, his charge was "run up tight" to the slab, and then as unceremoniously "joggled" over it at the expense of cloth and a bruise or two.

Constantini now went firmly at the obstacle, while I with some trepidation watched the rope below and looped a bight of it around the most available permanent projections within reach. He was as tall as Innerkofler, but more muscular and heavier, and perhaps the ceiling of the cave did not accommodate him so comfortably; in a few seconds he emerged under the slab, but feet foremost, and while both his hands were engaged in the recesses behind it, he endeavoured to swing his feet outwards and upwards to catch a leverage for a further advance. But I am convinced that this method was a wrong one; the sustained efforts were intensely severe, and only his splendid physique and brilliant agility brought him at last after an acute and lengthy struggle safely over the difficulty.

How he managed it I can hardly say; he seemed at one time while hanging head lowermost to grasp upwards with his legs, and ap-

peared to clasp the slab for a moment between his legs, while, somehow, he changed his handhold.

Of course for me now, with the rope held above, there was no danger; but I wished to climb the place if I could, and particularly desired to avoid any "state of suspense."

My guide, good fellow, carefully following my instructions not to pull the rope, gave me every liberty of action, while at the same time the rope was there in case of a slip.

I saw at first that the difficulty consisted in the want of available handhold outside the mouth of the cave where the beetling slab spread its smooth broad surface.

The chief point, therefore, was to get high up inside to begin with; and I followed Innerkofler's method, my inferior size enabling me to pack up into a smaller space and so neutralizing his advantage of reach. From this vantage-point I managed to put my arm well out and up, and got my fingers into the crevice on the right-hand edge of the obstacle. Then with some muscular effort, but without any undue scrambling, it was surmounted.

I would not attempt this passage without a

rope. With a rope "The Camino" is difficult, but not dangerous.¹

There was nothing more of interest all the way up to the top, and somewhat blown by the pace, we sat down and enjoyed the prospect.

Nearly all the noted neighbouring mountains were visible, save where the great middle Zinne towered above us and blocked the view.

Our time had been good and it was still early in the day. My German friend was highly elated, and expressed his hope of now being able to accomplish all three peaks. For myself I may confess that apprehensions of the difficult parts of the descent somewhat subdued the high sense of enjoyment which this uncommon summit afforded. Had we been safe below "The Traverse" the satisfaction would have been complete.

Having deposited our cards with the few already in the bottle, I clipped off the highest point (it is now a lady's brooch), and, the "Herr" being still in a hurry, Innerkofler began the descent.

How "The Camino" was negotiated by the

¹ We learned afterwards that there is an alternative camino, but it is also very difficult.

others I know not ; but Constantini piloted me down with a minimum of rope suspension ; and then, loosing the rope from our chests, he used it as on the Croda da Lago, both ends free, the middle looped over a crag.

But when he came to the crux of the matter above the slab, he threw the rope down to me, and, as if to vindicate his claim to the thorough conquest of the spot, he clambered down unaided and unsecured, Innerkofler looking on.

This speaks for his courage, but, as he might have been secured, I praise him not.

The other party now rapidly left us ; we were perhaps stale from the long trudge on the previous day and were not ambitious of mingling lesser achievements with the conquest of the Little Zinne. Besides, I had learned by experience the soundness of the principle of mountaineering, that it is dangerous for two parties to be on the same rock-mountain side at the same time. We determined, therefore, to let our companions get clear ; thus we had more leisure now to look about us, and observed that the Great Zinne, always opposite to us, although some hundreds of yards away, by the vastness of its bulk and the warm tone of its colour



BETWEEN THE ZINNEN.

seemed almost within leaping distance; only when the eye swept downwards towards its base in the dizzy depths below could we realize the gulf between us and it.

"The Traverse" still remained, and the proved absence of handholds rendering it unnecessary to make any search for them a second time, it appeared to me to be advisable to get over it as speedily as possible. Therefore, with the full approbation of the guide, I adopted the rather risky method of walking by balance alone along the extreme rim of the ledge, never touching but avoiding the inside rock all the way, stooping wherever the brow lowered over us, and edging sideways where there was no elbow-room.

It was a very "near shave," but had the advantage of comparative rapidity, thus spending less time in a position open to perils not to be provided against, where an instant of giddiness or of nerve-failure must prove fatal to one (or both if roped).

When near the base of our mountain and admiring the vast rounded bastion of warm brown rock of the Great Zinne, which seemed to hem us in and looked almost ready to fall

over upon us, we heard a patter of stones, and, staring hard, were surprised to see a moving spot upon the wall-like surface of the mountain. Gazing intently, the guide said it was the other party, now a thousand feet up their second peak.

It seemed hardly credible that any creature could cling there, yet there they were and moving easily.

The fact is the bulk of the mountain took away the sense of distance, and the real distance obscured the irregularities from the naked eye. The rock-face was not as smooth as it looked.

Without further adventure we reached the snow-couloir at the foot of the rock and gladly welcomed the rest and refreshment which awaited us there.

I feel bound to say that, while the climb is overrated as to its difficulty on the whole, the insecurity of certain passages is not fully estimated: and in my opinion the Kleine Zinne is a dangerous mountain in the incurable sense of the word.

IV.

THE GROSSE ZINNE.

IV.

THE GROSSE ZINNE.

THE other party had entirely disappeared, and, for aught we knew, were on their way down the other side of the middle peak to attack the third tower, when the question arose as to when we should take the Great Zinne.

We had no doubt of its feasibility. There is a good account of an ascent as early as 1872 by Captain W. E. Utterson Kelso, in the "Alpine Journal;" and Constantini himself had scaled it more than once.

It was on my list and ought to be tried some time or other, but I could not fancy myself returning to Cortina and afterwards repeating the wearisome journey hither again.

We might have gone back to the hut for a second night, but provisions were scarce, nor did I care to ask the guide to descend to the nearer village of Landro for a fresh supply with

another climb before us for the morrow, although he expressed his willingness to go.

So, after a thorough deliberation, we resolved to brace up our endurance for the effort and to take the mountain forthwith.

A long camino led from our halting-place nearly straight up, but inclining at first to the left until another similar one joined it, and both continued then in a direct line upwards for several hundred feet. This huge score was visible from the Little Zinne and resembled exactly a huge letter Y inverted.

It was near the top of this that we, from the other peak, had discerned the other climbers like mites on the side of a huge brown cheese.

And leaving our packs again, but this time taking nailed shoes, not "scarpette," we began our second ascent.

The camino gave no difficulty except that at the upper end of it a succession of ledges, with tops too sloping to be easy, had to be very carefully negotiated.

The line of the camino, now a wide rut in a sloping mountain side, was again taken and led us over a southern shoulder and through a gap right on to the south side of the mountain.

After passing through the gap we descended some distance and, with right-hand side to the rock, traversed a wild debris-strewn slope.

By-and-by Constantini turned his attention to the cliff and began scaling a rough breast of buttress-like formation. This was in many places fairly difficult, but there was no stretch of work so long, but that a friendly "*firma loca*" was at hand whence the stationary man could give all the help the climbing one needed.

The Great Zinne is not so perpendicular as to its sides, nor so smooth as to its surface, as the Croda da Lago and its lesser brother. I have no means of judging now, but I have been told that it stands about on a level for difficulty with the Matterhorn before the ropes were fixed to the latter. However it was certainly the easiest of the five mountains on my list.

The buttress seemed to bring us by a series of ledges up to a large camino, which was stiff climbing; a little more ledge-work, and then another camino. How thankful we were for these perpendicular clefts, they offered not only a comparatively easier, but a much safer way of ascent than topping a succession of cliff-brows in the open.

Nevertheless the open climbing gives the best practice, and ought on abstract grounds to be preferred. It is the highest form of rock-climbing, which, to those who like it, seems to be the highest form of mountaineering. It affords unrivalled exercise to mind, eye, nerve, and body. The mental combination of a resolution to progress, tempered by a suspicion which distrusts every foothold and hand-grip, is a fine training in patience and perception.

Again, the full confidence which is placed in a hold that stands the test is the basis for present satisfaction and immediate advance. The co-ordination of mental and physical faculties is a rapid process, and the processes are by no means as sluggish as their description. The decision to put full reliance on the safe hold comes from an instinct acquired by practice, and acts as instantaneously as the batsman's instinct at the wicket, or the sportsman's in the coverts. A good cragsman will see and reject half-a-dozen holds at each step or reach, without apparently pausing for the test.

In a long rock-climb every muscle is brought into play, the back and shoulders as well as arms

and legs are thoroughly exercised to the great benefit of every bodily organ. Taken altogether, there seems to be nothing equal to good stiff rock-work for full enjoyment, perfect exercise, and the best of discipline for nerves, mind, and body.

A short traverse, again with the cliff on our right, brought us next to the entrance of a very peculiar gorge in the mountain. Into this we clambered, and found, to our great relief, a crystal pool of water replenished by the drip from melting snow far above.

While enjoying a brief rest here, we heard the voices of our former companions directly over our heads. Giving a shout to let them know we were underneath, we resumed our course, and ere long overtook them.

This gorge soon closed in its outer edges and became a funnel, and we found ourselves climbing in the comparative darkness of an interior. In this spot there are some overhanging blocks to surmount, and a previous traveller thus records his experience :—

“ Happening to be here a little in advance of the others, I began climbing a sort of chimney, but was stopped near the top of it by a project-

ing knob, over which I struggled in vain to hoist myself.

“Peter, seeing my position, came up after me, and giving me a butt or powerful toss with his head, sent me, more effectually than agreeable, over the obstacle.”

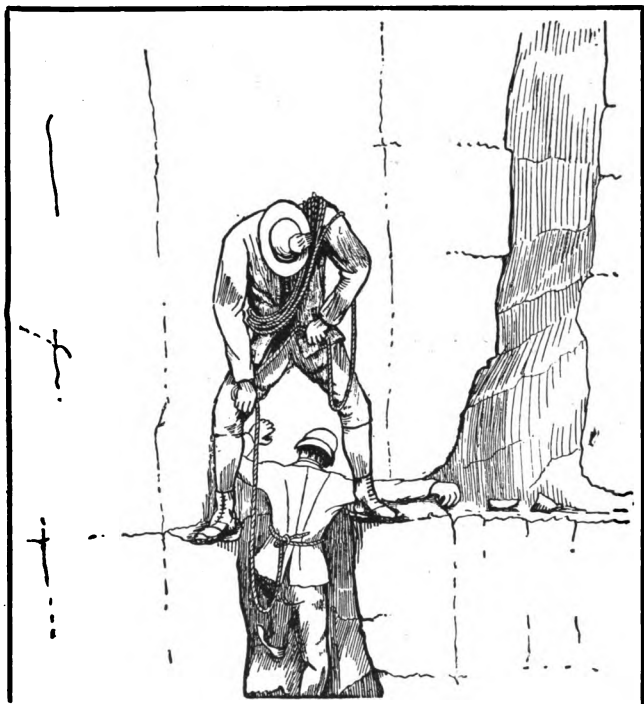
Above this chimney came more shelf-work, fairly pleasant in good weather, with rocks clear of snow, but, I should think, quite impossible under the opposite conditions.

My next note records a strange camino not very long, which split the brow of the cliff with its narrow cleft at the top. Here Constantini turned, and stood, like the Colossus, a foot on either side, while I climbed up and had no alternative but to crawl up behind him between his legs.

We were now near the top, and a slightly spiral course brought us, along with my German friend, upon the flat-topped yet fissured summit.

Our party had taken less than two hours, which comprised a halt, from the base of the rock to the top. As the perpendicular height covered would be over 3,000 feet, it may be judged that we were in good condition.

After some forty minutes enjoying the panorama, which included a magnificent view of the deeply-coloured Croda Rossa, and an extended



THE COLOSSUS.

survey of the rock-broken glaciers of the straggling Marmarole, we began the descent.

Our companions diverged to the west soon after leaving the dark chimney, and we saw

them no more; but our course led us back to the eastern base, where the pack had been *cachéd*.

The descent of the Grosse Zinne was more trying to the nerves than might be expected. The amateur of course had to lead. The caminos were easy enough, but the wide faces of open rock where every belt of strata represented the brow of a precipice, over which one had to drop feet foremost and feel for uncertain and oftentimes non-existent footing, made large demands upon confidence. How Constantini managed to mark out the proper spots for these experiments I cannot tell. On only one occasion did he direct me to the wrong place, and then I was able to correct the error, having fortunately craned over the edge before trying it.

Although the features of the descent have left little impression save that of toppling over the edges of an interminable series of successive cliffs, we found that it occupied much more time than the ascent. The last awkward piece was the group of ledges just above the long camino. At length the snow-couloir was reached, and another assault made on the commissariat.

Then came a weary trudge across the southern

grava, retracing our steps of the previous evening; and next a long descent through alps and pine-woods to the road, which led us, in altogether four hours, to Schluderbach.

We were still eleven miles from home, and unfortunately no vehicle was to be had.

A long rest at the very comfortable hotel was welcome, and here I had the fortune to make the acquaintance of Santo Siorpaes, perhaps the leading guide of South Tyrol, and of Josef Innerkofler, the youngest of the brothers, and the one who was so soon (within two months, alas!) to meet his fate upon the Fünffingerspitze.

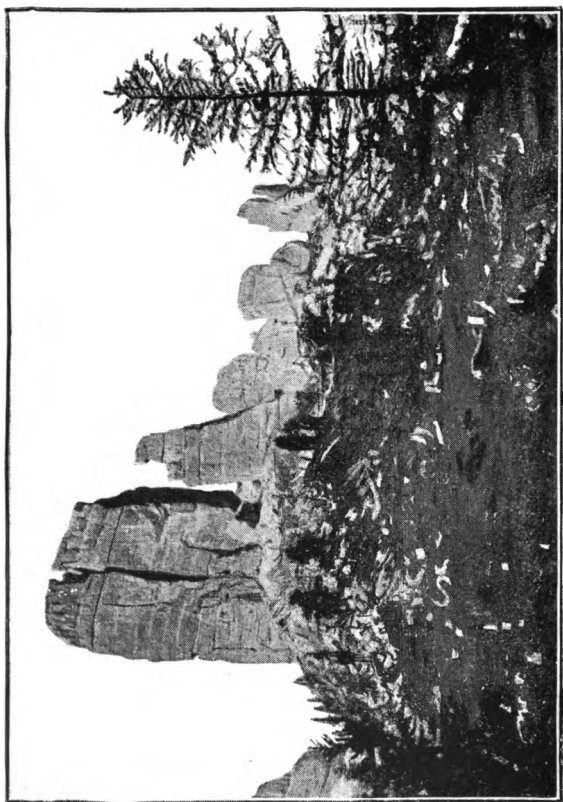
He was tall, like Franz, but much brighter-looking, and evidently had a full share of the daring courage of his family.

Santo Siorpaes is short and neat, with that loose-jointed style of limb that goes with great muscular strength. He appeared to me to be possibly of any age from thirty-five to fifty-five, but from Alpine records he is probably over sixty. Still there can be little doubt that his agility and enterprise are as useful as ever, and I should judge that he has the social qualities also which go to make up the first-class guide.

Our uncertainty was ended by the telephone. This "resource" ordered on our behalf a comfortable carriage from Landro, which bowled us into Cortina that evening in time for *table d'hôte* at the Aquila Nera.

v.

THE CINQUE TORRI ROCKS.



CINQUE TORRI.

V.

THE CINQUE TORRI ROCKS.

A VERY prominent object in the view westward from Cortina, is a group of rocks called the Five Towers.

The chief tower rises erect for 1,000 or 1,200 feet ("Alpine Journal," vol. x., p. 180), and stands as if it were a castle keep, to guard the Costeana Thal and the Val Falzarego.

For many years they were deemed inaccessible, and the fact that no chamois had ever been seen upon the top, was taken to put the matter beyond question.

In the year 1880 (or 1881), Mr. C. G. Wall, with Giuseppe Ghedina, made the first ascent. His account records that they had a rope eighty feet long, and they reached the top in "three hours from foot," and in descending occupied "two hours and forty minutes to the foot, where we rested."

Giuseppe Ghedina said .

" Per Dio, in not one of the mountains here is the most difficult bit as hard as the easiest in this." Furthermore, we are told that the other guides of the neighbourhood, headed by Santo Siorpaes, congratulated Ghedina on climbing "the last unascended peak of the Ampezzaner Dolomites."

These sayings are quoted in order to show how easily a rock or a mountain may gain a genuine reputation, which after-familiarity as easily dissipates.

Not that Ghedina's statement is overdrawn, nor that the climb is in any part of it easy-going, but there is no reason why anyone who can hold on, say, to the under side of a ladder, should fall. Moreover, the height to be clambered is not very great, and the difficulties on the whole bear no comparison with those of the mountains here described.

With Constantini, and a good rope, I left the "Aquila Nera" early one morning in July, and after about two hours of gradual ascent along the path which leads to the Nuvolau, a well-known point of view, we arrived at the foot of the Cinque Torri. Here we parted with some

ladies who were walking on to the Nuvolau for the view.

The rock is absolutely unclimbable on every side.

But a strange rift, or rather two rifts, crossing each other nearly at right angles in the middle of the rock, run right through it splitting it into four nearly equal towers which are quite separated from top to base. Our object was to enter one of these chasms; and making our way over and sometimes under huge boulders we penetrated the main rock from the side next to the other and lesser "Towers" which make up the number.

After some very rough up-and-down work in semi-twilight, the very heart of the rock was reached; and here where the four clefts met, a larger space was found. Up the ragged sides and corners of this lofty belfry-chamber-like hollow, our route led to the open air and sky immediately above, which glimmered down upon us through a wilderness of rocky confusion.

I could not help likening this strange interior to the disordered inside of a mighty castle, the boulders which fell across and blocked up the

space at intervals seemed to be the various floors ruined and wrecked. Although the scale was such as to suggest rather that a whole village had been shunted in at the top, various houses sticking on the way down.

The climbing was most interesting; every form of arête and rock-face, chimney and pillar-work was here, and even short traverses occasionally.

The light was poor, for we were quite shut in from all direct rays. The rocks were damp and cold, ice-glazed in some places, and a strange fitful dropping of hail which seemed to wander down aimlessly from the opening far above served to indicate the weather outside.

In fact we were in a chimney, a gigantic one, and although at times we found the space enlarged to the proportions of a baronial hall, yet the obstructive blocks of rock, some as large as a house, almost a church, which had here and there fallen across the spacious interior, hindered the free descent of light. Moreover, as we found on reaching the top, the clefts grew narrower at the summit, and the separated peaks of our main tower were so near in fact

that a good leap would land a man across either crack.

These fissures were by no means straight, only when we reached the top did we see that they ran right into the centre, and when once we were inside we were shut in from all save the sky above.

The novelty of climbing in the gloom and of scrambling over, under, and around the masses of rock had a weird effect. Once we reached the entrance to a kind of alcove with overhanging roof of Dolomite: and pausing on a shelf, which projected like a capital to the column we had climbed, I wondered which way we would go next. The guide soon took up his trail along a narrow, horizontal cornice, caused by the stratification of the rock and running quite round the wall of the chamber. This bore us round to another capital, outside of which the course was plainer.

There was a great deal of what I should call buttress-climbing. When no other way up a Dolomite is feasible, a projecting perpendicular rib of rock like a thin edged buttress may be tried. These were more ragged on this interior than they are when exposed to all weathers,

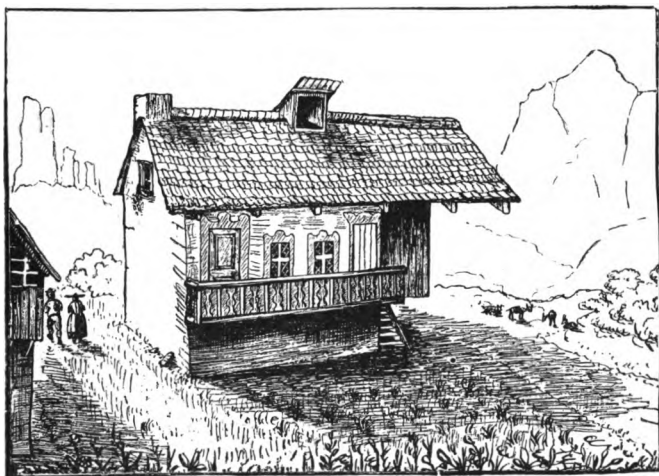
outside. Here the stonefall too was less forcible.

This steep arête or pillar is grasped, as well as may be, with both arms and both knees, and by pure "swarming," with here and there a crevice for the finger-tips or a chance knob for a foot-hold, the elevation is accomplished.

The snow-mountaineers, who delight in the white slopes of Marmolata, Mont Blanc, and the Jungfrau, despise this kind of rock-work, under the name of "gymnastics;" the rock-men retort that snow-work is not climbing in any sense of the word, but walking. Each man can choose his own form of mountaineering, only let it be carried out with safety; the whole pursuit is too exhilarating, too pleasure-giving, and too grand for any sectional preference to be allowed to embitter comparison.

In any case the tourist who intends to make close acquaintance with the Dolomites cannot do better than make his *début* through the Cinque Torri. If he be fresh from the sedentary life of home, he will find this ascent a short one and not too fatiguing for a preliminary training bout.

The variety of the work, the interest of the strange surroundings, the study of the peculiar strata of the Dolomite, the excellent practice in every form of rock-work, the accessibility from Cortina, all combine to render the Cinque



IN CORTINA.

Torri worthy of the earliest attention of the amateur.

After about one hour of actual climbing we stood upon the strangely flattened summit. We were in good condition, and the knowledge of a route up accounted for the better time.

The view was not extensive; massive moun-

tains of a greater altitude being all around us. Out on the long slope of the Nuvolau we beheld our view-seeking companions of the morning, and a loud hail brought forth a silent, or at least an unheard response.

The snow now began to drop around us in an undecided manner, spoiling our prospect. We heard afterwards that our friends had had rain, but neither snow nor hail, showing the difference a thousand feet or so may make.

We visited three of the separated rock-crowns, and I was disposed to try the leap to another, but the guide would not hear of it. I judged the distance at sixteen feet, there was a good run and, with the rope in case of a slip, it was safe enough, but as a matter of course, caution ruled.

The total area of the top would be nearly half an acre. The vegetation was confined to dwarf mosses and lichen.

In our descent we took still less time, and after some thirty to forty minutes stood once more on the short green turf on the mountain side at the foot of the chief rock of the Cinque Torri.

The Cinque Torri cannot be ranked as a mountain, but it is a magnificent rock, and it

stands on a mountain. Its ascent will count for nothing, and there is no view worth mentioning, but it may well be recommended to the visitor for the sake of the training and excellent practice it affords.



PRIMULA FARINOSA.

VI.
TO CAMPITELLO.

VI.

TO CAMPITELLO.

ONE clear week of the holiday remained and two mountains ; these last were near a remote village called Campitello.

Soon after dawn on Monday morning I took leave of the Ghedinas, and, with all my then worldly goods in an Einspänner, slowly traced once more the road which winds up the Campo di Sotto, on my way over the Tre Sassi and other passes to the unknown region due west of Cortina.

This road easily beat the Tre Croci pass for roughness, and, with nothing to do or think of except comfort, I was more exhausted by the journey than by a fair mountain climb.

A detour of 120 miles one way or of ninety in another would have brought me up from the south by possibly a better and certainly not a

worse road. But I cannot be certain of this. I left the place by way of a mountain-top, and think that is perhaps the best way of approach, or, maybe, a better plan still, is not to get into the place at all.

The descent from Tre Sassi to Andraz was enough to test the strong keel of the Einspänner; we drove down, it was not broken, so I knew nothing could break it. The castle of Andraz stands at the junction of three passes, and is a very imposing ruin, but it is difficult now to imagine that the traffic was ever worth waiting for, or that the adjoining country ever produced anything worth plundering.

Nevertheless, the middle section of the journey, passing by Livinalongo, was prosperous and comparatively civilized; the road even was good, only it began and ended in the wilderness.

At this village I changed horses and Einspänner, as nothing could persuade Ghedina's coachman to venture further. They had kindly arranged this change for me, however, and the landlord at Livinalongo seemed a capital fellow, and gave a good luncheon without any overcharge.

The new vehicle was a marvel of power within strait limits. In bodily shape between a costermonger's cart and a coffin, it was nearly as strong as a steel-ram, and a heavy keel of stout timber running from end to end inclines me more towards the nautical resemblance. It might have served for a kind of a mountain Monitor, tossing merrily along (not on billows, but) on four tight little wheels, two a long way in front and two a long way behind, the whole concern utterly springless.

My bag and I popped up and down in the hold ; sometimes I fell upon the strapped cushion and retained the seat, sometimes I was ousted by "Gladstone."

The comparative smoothness at the start was like the calmer water of the harbour's mouth, but where the Livinalongo commune or parish terminated there the road ended and the breakers began.

True a braid of footpaths cut the turf as far as Araba, a settlement strewn about on the grassy slope, but here all traces ended. Gaily we launched out over the sea of turf, and aiming for the lowest dip of the mountain range, continued for miles of comparatively easy going.

Here and there a brook with steep banks had to be "rushed," when of course I viewed the process from outside. In one such place the horse jumped down first; as he put his fore feet up on the opposite bank the front wheels of the vehicle thumped down into the stream, the contents were hurled in all directions, but the trap held together. There was then a pause for breath; next, with a mighty effort, the game little nag sprang upon the bank, bringing down the hind wheels with a burst and a crack that jerked the front ditto half out of the stream, and then a nimble second spring secured them. Another short pause, and again a brave dash and the whole construction was once more upon the level sward.

Once over the neck of the ridge we had a fine view of the magnificent Fassa group, with the evening sun setting behind them.

On the extreme right (north) the Langkofel was most prominent from its immense bulk, but unfortunately it was nearly hidden by a nearer ridge, while the nearness of the Grohmann Spitze gave it more prominence in the centre.

The chisel-like form of the Zahnkofel came

next, and the milder-featured Plattkofel terminated the range southwards.

But the most striking, and to me by far the most interesting mountain in the whole group, was the sharp-pinnacled Fünffingerspitze.

Seen from this Pordoi Pass the taper fingers were unmistakable, and the "Daumen" (or thumb) stood out in a natural and conspicuous manner. It occupies a rather retreating position between the bulkier Grohmann Spitze and the Langkofel.

At the base of these mountains the vast grava-slopes were sheeted with snow; below these came the green sweep of upper pasture, succeeded next by the darker belt of firs which stretched down to the invisible bottom of the valley below and between us.

Where the bright Dolomite summits caught the setting sun a fiery glow of rosy-pink, seen nowhere else in the world, seemed to shine through the peaks, as if the rock were an ember all aglow. The shadows of this strange rock are pale cobalt blue deepening into purple, and as I saw them that evening, the Fassa Dolomites, with the giant hand of the Fünffinger, afforded the most unworld-like scene of brilliant

beauty and unapproachable weirdness it had ever been my lot to behold. Apparently hanging in the air at times, they lingered before us for some hours, until with the sinking sun they vanished. We, too, went gradually down, and at length found the village of Campitello and the Albergo Mulino, kept by Bernard.

I lost no time in finding out his brother Luigi, one of the few guides who had ascended the Fünffingerspitze, and one also of the too few who appear able to balance a high degree of enterprising courage with a caution in details which never slumbers.

After a talk over the Kleine Zinne, etc., etc., Luigi Bernard soon set my mind at rest as to the Fünffinger, but his report of the Langkofel suggested a doubt as to whether the conditions of atmosphere, etc., would enable me to complete my card.

The evening did not promise a favourable morrow, and the "voyage" had taken so much out of me, that I determined to rest for a day before attempting such a peak as the one on which we had designs.

That day was spent in sketching and in vainly endeavouring to imagine the kind of

consciousness of social existence possessed by the juvenile population of this isolated valley.

What would I think of life, what of the world, how would I feel, if I had been born and reared here?

There was something pathetic in the lot of the children involuntarily confined to such an outlook as that presented by this place, and I could but pity them.

But I happened to know that they were all as ready to pity me, and my estimate of their unhappiness, founded upon my knowledge of my own sensations applied to their conditions, was probably just as mistaken as is the pessimistic conception of the actual misery of creation, based upon a scientific knowledge of the aggregate suffering of the whole, luridly illuminated by our own sensitiveness and imagination.

the first of these was the discovery of gold in California in 1848. This discovery led to a great influx of people to California, and the state became a free state. The second was the discovery of gold in Nevada in 1859. This discovery led to a great influx of people to Nevada, and the state became a free state. The third was the discovery of gold in Colorado in 1858. This discovery led to a great influx of people to Colorado, and the state became a free state.

The fourth was the discovery of gold in Idaho in 1860. This discovery led to a great influx of people to Idaho, and the state became a free state. The fifth was the discovery of gold in Montana in 1862. This discovery led to a great influx of people to Montana, and the state became a free state. The sixth was the discovery of gold in Wyoming in 1869. This discovery led to a great influx of people to Wyoming, and the state became a free state.

The seventh was the discovery of gold in Utah in 1863. This discovery led to a great influx of people to Utah, and the state became a free state. The eighth was the discovery of gold in Arizona in 1863. This discovery led to a great influx of people to Arizona, and the state became a free state. The ninth was the discovery of gold in New Mexico in 1861. This discovery led to a great influx of people to New Mexico, and the state became a free state.

The tenth was the discovery of gold in Texas in 1845. This discovery led to a great influx of people to Texas, and the state became a free state. The eleventh was the discovery of gold in Louisiana in 1848. This discovery led to a great influx of people to Louisiana, and the state became a free state. The twelfth was the discovery of gold in Mississippi in 1848. This discovery led to a great influx of people to Mississippi, and the state became a free state. The thirteenth was the discovery of gold in Alabama in 1848. This discovery led to a great influx of people to Alabama, and the state became a free state.

VII.
THE FÜNFFINGERSPITZE.

VII.

THE FÜNFFINGERSPITZE.

THERE is an obvious reason why one who makes an unsuccessful attempt upon a mountain, or anything else, should not be too eager to see his experience in print. There may be reasons also on the side of publication, and in some instances men are magnanimously able to allow the latter to predominate.

Many unsuccessful assaults had been directed at the upright walls and airy pinnacles of the Fünffingerspitze before it surrendered. There is a record in the D.u.O.A.V. "Zeitschrift" of one of these attacks made by Herr Dr. Darmstädter, of Berlin, who first made

AN ATTEMPT ON THE SOUTH-EAST SIDE.

On the 21st of July, 1888, the Herr Doctor, accompanied by J. Niederwieser (commonly

called "Stabeler") and Luigi Bernard, went by way of a snow couloir on the southern side of the mountain, from the top of which they traversed the rocks towards the right or east. There, surmounting a massive "back of rock" they turned diagonally back again westward and entered the gorge which leads up to the Daumenscharte, *i.e.*, the junction of the "thumb" with the other digits. "From here they clambered again some 200 feet up the wall of the second 'finger,' but retraced their way, as the rocky arête which came next was extremely steep and disintegrated, and seemed to Dr. Darmstädter to be too friable and dangerous."

Nothing daunted by difficulty, the worthy Prussian returned to the assault and made repeated attempts in the summer of 1889; and still undeterred by the failure, again published his experiences in the "Mittheilungen" of that year, thus keeping the Fünffingerspitze before the public. Moreover, he gave a keener edge, if possible, to the mountaineering appetite for the inaccessible, by declaring his conviction that "the peak could not be conquered unless under particularly favourable circumstances or by artificial (*Künstlichen*) aids."

The equally vain attempts of others seemed to confirm this opinion.

ATTEMPTS ON THE SOUTH SIDE.

In the same year, 1889, Herren R. H. Schmitt, of Vienna, and J. Santner, of Botzen, made several determined efforts to ascend by way of a deeply cut camino, which runs up almost from base to summit of the south face of the mountain.

But the steepness of the camino, which appears absolutely erect to an observer, and actually overhangs in some places,¹ and the quantity of ice which choked the narrow funnel, and perhaps other difficulties, combined to render their efforts fruitless.

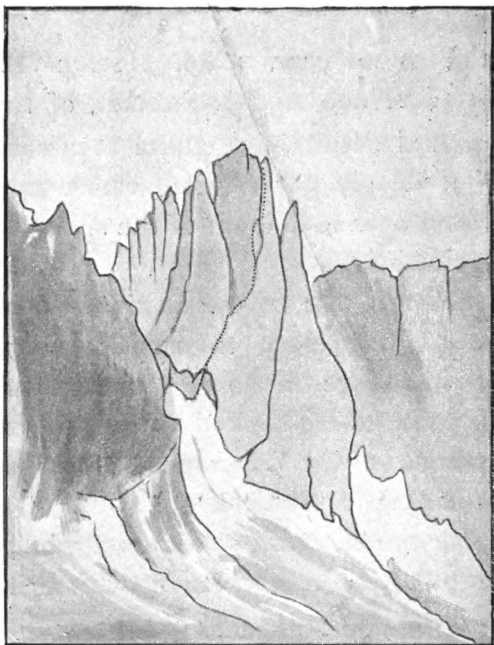
Whether the climbing public as a whole was induced by these defeats to acquiesce in the opinion of the impregnability of the mountain or not we cannot say, but it seems certain that it was almost entirely left alone for the following year, viz., 1890.

On June 20th and 21st, however, of that year, Herr Norman Neruda tried ineffectually the

¹ Alpine Journal," November, 1892, p. 214.

same camino on the south, being stopped by the then unmelted ice.

The only other party known to have at-



THE FÜNFFINGERSPITZE, FROM THE SOUTH.

tempted the mountain that year was the one destined to obtain well-deserved success. Messrs. Schmitt and Santner vindicated their claim to the honours they had so persistently striven

for by achieving the summit on August 8th, 1890.

They published an account, a very short one, of their climb (in the "Oesterreichische Alpen-Zeitung" for 1890, page 215), which caused a sensation in every Alpine club in Europe.

Herr Schmitt had a good reputation as a judge of difficult work, nor was his description, strong as it was, considered to be in any degree over-coloured by mere self-glorification. The character of his estimate may be judged from the way in which he challenged the world in the final sentence of his article, a rough translation of which is appended.

"In company with Herr J. Santner, I left St. Maria, in Gröden, on the 8th August, at 2.55 a.m. After a rest in the last house on the Sellajoch we stood, at 5.55, on the foot of the rocks on our mountain. Off at 6.20. Here I left the shoes behind, and our whole luggage was also hidden. At 7.50 we stood at the beginning of the first flat, where also Herr Santner left his shoes. We mounted over the flats, ascending upon a pulpit, above which the overhanging wall rises up from 150 to 200 metres.

“A passage (chimney) which begins on the (*gipfelgrat*) summit-ridge ends at our pulpit. We were doubtful of getting any farther; I was anxious, however, to make an attempt to get over the first steps, because the upper part of the fearful abyss appeared less difficult. We tied ourselves with the thirty-six-yard rope, and clambered under the quite fifteen to twenty yards deep projection by which the passage proceeds. Herr Santner called this niche ‘the Kirchl’ (chapel). It was now necessary in the passage, from the canopy of which water dropped down, to climb fifteen or twenty yards horizontally outward. The abyss opens out downwards very wide, and one climbs out between the narrow walls horizontally over a gulf about two hundred yards deep, there being no kind of projection in the walls visible to the eye right to their base.

“Once fairly out of this, we had to climb over an overhanging block in the passage.

“The position is extraordinarily difficult and indescribably exposed. One climbs as though on the roof of a vault 150 to 200 yards high, split off by a great chasm, fifteen or twenty yards horizontally outward.

“Herr Santner followed me, and forthwith we

reached a place which, if less exposed, was technically speaking still more difficult, viz., an overhanging passage without foothold or hand-fast, and overrun with water. Only by the most resolute and energetic efforts is its conquest possible. Herr Santner said, when he too was at the top of it, that it was incomprehensible to him how it was possible to have climbed up without a rope. Several overhanging rocks followed, but less difficult, until at length the passage became impassable. We then mounted over the left-hand wall with the intention of getting out of the passage, and climbed a long while right over frequently overhanging and most difficult wall steps until above a narrow band, a yellow wall compelled us to turn outwards towards the right. We vanquished the deep abysmal passage by a descent of about two yards on this side, and straddling over to the other wall. Soon, but with great difficulty, we climbed up over this wall. It partly overhangs. Now, over easier gradations towards the left, we succeed in mounting the notches up to the fork under the summit, which really is a stone window (*'Steinfensterl'*).

“We mounted now on the northern side, and,

going over the ridge to the left with much more ease reached the summit at 10.20. Herr Santner built two 'stone men.' No other way to the summit appears possible. At 12 o'clock we quitted our peak, and by 4 o'clock had left the most difficult places behind us. At 4.15 we laid aside the rope, and at 4.30 reached our packs. On again at 4.45. At 5.15 we were at the huts of the Sellajoch, where we rested until 6 o'clock. At 7.30 we reached St. Maria.

"The expedition is by far the most difficult which I have ever undertaken. In no other peak are there so many difficult nor so many dangerous places to overcome. Who will bring down our cards?"

"ROBERT HANS SCHMITT."

Although public attention was thus drawn to the feasibility of the mountain, the fact that no other attempt was successful for over a twelve-month in these days of ravenous peak-hunger, seems to justify to a great extent the high estimate formed by him.

Nor need the further fact that the second successful attempt, September 4th, 1891, was accomplished by a woman, militate against his

view, for the lady, Madame Immink, of Amsterdam, is one of the most accomplished mountaineers of the age, and one to whom a reputation for difficulty would be the chief charm of a mountain. She was accompanied by Antonio Dimai and Giuseppe Zecchini.

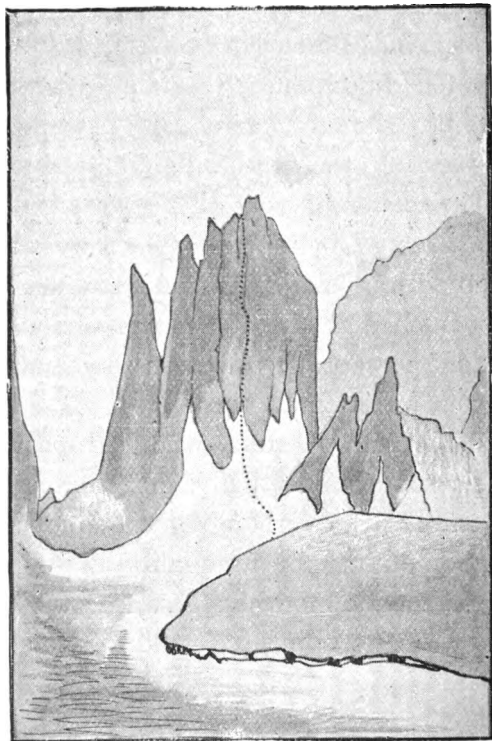
The route up the south side followed by both these parties was by way of the same enormous camino already mentioned, which was largely occupied with blocks of ice and streams of icy water. Such was the roughness of the work, that it left perceptible traces on their garments, which were "extremely torn."

Herr Norman Neruda, who had previously tried this route ineffectually, describes it as "a steep, at places overhanging, chimney;" and it says something for its quality that his next attempt, fourteen months afterwards, was made upon exactly the opposite, or north, face of the mountain.

THE NORTH SIDE.

To Herr Norman Neruda belongs the credit of the third ascent, and of discovering a new route. In fact, although he gallantly acknowledges Madame Immink's prior arrival on the

summit, the two ascents were practically simultaneous ; singularly enough, while the whole



THE FÜNFFINGERSPITZE, FROM THE NORTH.

base of the mountain was between them at starting, they both approached the same cleft between the second and third "finger" (or was it the

third and fourth?), and for some distance below the top each party heard the voices of the other mysteriously sounding through the riven rock-heart of the peak.

This new route was the one adopted by Herr Dr. Hans Helversen, of Vienna, who was the first to print anything like a detailed description of any way up this mountain.

He started from Campitello on September 6th, 1891, and, after passing along the south grava, went through the rocky pass on the east of the Fünffingerspitze so as to arrive on the northern side.

His account occupies four pages of the "Mittheilungen" of the German and Austrian Alpine Club, for April, 1892; and as it has not yet appeared in English, I present the interesting part of it in a not over-Anglicized dress:

"By 7.15 the fragment-strewn Langkofeljoch was reached, and twenty minutes later we stood, in descending Langkofelkar, by the last northern rocky spur of the Fünffingerspitze, and just where the Grohmann Glacier joins it. Here we halted from 7.35 until 8.5 for breakfast.

"After we had hidden the greater portion of our luggage under a projecting rock, the porter

was here dismissed, and we four, viz., my wife, Herr Lubber, I, and Stabeller, set forth on our way over the at first steep, but afterwards plainer, Grohmann Glacier. If I mistake not, the fourth or fifth largest snow-tongue to the left stretches farthest up the rock of the Fünffingerspitze. My wife being roped with me, Herr Lubber with Stabeller mounted the rocks because this snow-couloir was separated by a ridge from the glacier.

“ The couloir is steep, and was in many places so hard frozen that steps—in one place about twenty—had to be cut in the black hard ice. Most often we trended to the left in the rocks. Before the end of the snow-field we reached a strongly-inclined little terrace, by means of a short path towards the left (eastward) over the rocks, and rising in the same direction, over fairly easy boulder-covered projections. Here we took a short rest, which Stabeller utilized for the purpose of reconnoitring.

“ As three ice-axes were already left behind on leaving the snow, so here were laid down also the fourth and the remaining luggage, as well as mine and my wife's shoes, which we now exchanged for the very useful scarpette, and only

some provisions taken with us. Further on we established yet other depots, in which the remaining provisions and shoes were left; only an apple—in the pocket of Herr Luber—reached the summit, in a very damaged condition.

“For a short time we continued our way rather to the left, partly over wet smooth stones, until we were obliged to mount directly up the now sheer and upright wall. A more difficult, much steeper, and more open passage of about one and a half rope’s length, with rounded spurs running downwards, accelerated further ascent. We avoided this track in descending, and clambered down through another, to the east close by, and only separated by an angle in the rock. In ascending, this easy passage escaped us, because it was not visible at the entrance of the before-mentioned one, and could only be got at by going through a narrow cleft in an uninviting perpendicular wall.

“This was followed by several easier pathways and wall-steps, until we reached the top of a small rocky projection at the foot of the perpendicular and partly overhanging upstanding towering summit. This projecting rock can doubtless be reached by another way than ours.

“ The key of the ascent is in the now following passage, sixty mètres high. At the first glance, the smooth yellow wall of the tower seems inaccessible. Right in front of us certainly is the commencement of a passage, but its continuation appears high above only as a black stripe in the rock. A straw tube of a Virginia cigar found upon the projecting rock led us here for the first time to the conjecture that we were on the track of Herr Norman Neruda and the guide Klucker. Stone-guides or other way-marks were, according to Swiss principles, not erected by Klucker. An English newspaper found afterwards in the first part of the passage confirmed our supposition.

“ In San Martino I had understood, from an expression of Herr Norman Neruda, that the passage through which he had clambered led up between the second and third fingers. As that lying before us led through the middle of the wall of the peak, I doubted, up to the point of time mentioned, the identity of our rock.

“ The passage is composed of three sections almost equally high. The middle section demanded the greatest circumspection. The lowermost is relatively less steep, only a jammed-up

block of about two mètres high (which may be surmounted on the right), caused great difficulty. It sits almost overhanging the narrow ridges of rock which divide the sections ; the walls of the passage are, moreover, smooth, and open outwardly. With back and head against the one, and feet and hands against the other wall, one must slowly screw upwards with all possible side-pressure. The jammed-up piece of rock almost forces the body out of the end of the passage. After surmounting this place the passage shapes like a knee, which affords a well-earned rest to the exhausted lungs.

“The third compartment is, however, easier to pass. It is similarly blocked by a jammed-up rock, the smallest. This last, however, leaves with the inside of the passage so much free space, that the ever-forward-climbing bold Stabeler could cram himself through, a process which was carried out with equal bravery and grotesqueness. We others preferred to climb over the rock on the outside, whereby we certainly reached a very exposed situation.

“There remained only a few more rugged places, as well as past the “Fensterl,” through which the other party is supposed to have

reached the summit, and in a few minutes we were, at 12.55, standing on the proud pinnacle. (Four hours and five minutes from the snow.)

“Long rest, however, was not granted us up here. The weather on this day did not look very secure, and even appeared likely to turn bad, and we were anxious before the coming on of darkness to leave the Langkofelkar behind us. The fairly divided apple was quickly devoured, and a short notice placed in the tin box. Herr Lubert took the card of Frau Immink, who appears to have forgotten the intention of taking the card of Herr Schmitt; I took those of Herren Wood and Norman Neruda.

“At 1.25 after half-an-hour's rest, we began the descent. The appearance of the long passage from the upper end is startling. Without trial one might declare it impassable. The small rock-head at the end of the only partially visible cleft lay deep below, almost at our feet, and all around appeared only steep precipitous yellow walls. In forty-five minutes we had all four passed the passage. The climb down demanded much less time and less exertion, if increased caution.

"I will also here add, that from our rock-top to the east a narrow snow-couloir cut in downwards, steep and frozen, from which not far below us, another passage, parallel with that we had used, and visible from the Langkofelkar led to the bottom. From our standpoint we could see the passage no farther, and without the ice-axes and shoes could not examine it by way of the frozen snow-couloir so as to prove its feasibility.

"Gathering up our things on the way we reached our breakfast place at the end of the Grohmann Glacier at 4.35. (Three hours and ten minutes from the top.) We took only a short rest, and then, heavily laden, took our way towards St. Ulrich. We arrived there in the course of the evening.

"To sum up my opinion of the character of the tour up the Fünffingerspitze, permit me to say that I must pronounce it in the strictest meaning of the words, very difficult. Of all the mountain tours with which I am hitherto acquainted, only the ascent of the Kleine Zinne from the north can be placed beside it; the usual routes up the Kleine Zinne, the Sass Maor, and the Croda da Lago are not to be

compared with it, either in the necessary endurance or in the skill in mountain climbing."

Although the first to discover the way up the north face, Herr Norman Neruda did not print a record of his experience until after the above description had appeared in German.

In June, 1892, he read a full and interesting account of his ascent, before the Alpine Club; and that paper afterwards appeared in the November number of the "Alpine Journal" for that year, where it may with advantage be consulted. He corroborates Dr. Helversen's description of the long camino, but adds further interest by giving details of the descent, which I venture to quote here.

After spending one hour and sixteen minutes on the top, he says:

"Klucker and I left at 1.16. We took great precautions on our descent, and even went as far as to use a thin but strong rope in addition to the ordinary one. To begin with we tied it round the stone wedges in the upper part of the chimney, and threw both ends, weighted by stones, down the chimney, calculating that it would serve as handhold where Nature had not

provided such; but at the only place where I should have liked to use it, and where I turned round to catch hold of it, it was out of reach at a distance of about two yards; a fact which sufficiently proves that the chimney overhangs considerably. However, we repeated the process of tying the rope to conveniently placed rocks, until we got tired of finding the contrivance useless and, moreover, apt to slip into cracks, out of which it was hard work to pull it. So, not wishing to lose any more time, we gave it up. Against our expectation, the most difficult part of the ascent proved not so terrible on the way down, for we could let ourselves slide down through the chimneys with comparative ease and perfect safety, always, however, taking care not to forget that some of them were overhanging, and to climb more into the mountain where that was the case. The easier parts of the ascent seemed more difficult in descending, partly because it is generally more difficult to climb down over steep rocks than up, partly because we made several mistakes, and, finally, I dare say, because we were getting a little tired. Picking up in succession my hat, ice-axe, and coat, Klucker's boots and rucksack,

we reached the Grohmann Glacier at 6.23 p.m. (Time in descent of rock five hours and seven minutes.) We had not had anything to drink for eleven hours and taken no food for twelve. At 6.50 p.m., after having to some extent satisfied the inner man, we left the glacier and arrived in Santa Christina at 8.30 p.m.

“The Fünffingerspitze is the most difficult rock-climb I have ever done. The Kleine Zinne, the Croda da Lago, the Cima di Canali, the Cima della Madonna, and other peaks of reputed great difficulty I have climbed cannot for one moment be compared with it; in fact, they are mere child's-play by its side. As to whether Mr. Schmitt's route requires greater strength and more skill than ours I cannot say. Schmitt thinks so. On the other hand, both Klucker and I agreed that Schmitt's way must be the easier, for had not a lady conquered the difficulties it presents? And we felt sure that no female would repeat our ascent. Vain speculation! On September 16th, that is, twelve days after we had been on the mountain, Mrs. Helversen accompanied her husband and another gentleman when they climbed it by our route. This, again, proved to me the futility of pro-

phesying as to the possibility or impossibility of the repetition of an ascent, by whomsoever it may be, when once it has been shown to be possible by one person."

THE SOUTH-EAST SIDE.

This, the scene of the first recorded attempt, was destined to afford another route to the top.

The credit of accomplishing this belongs to Mr. H. J. T. Wood under the guidance of Luigi Bernard of Campitello.

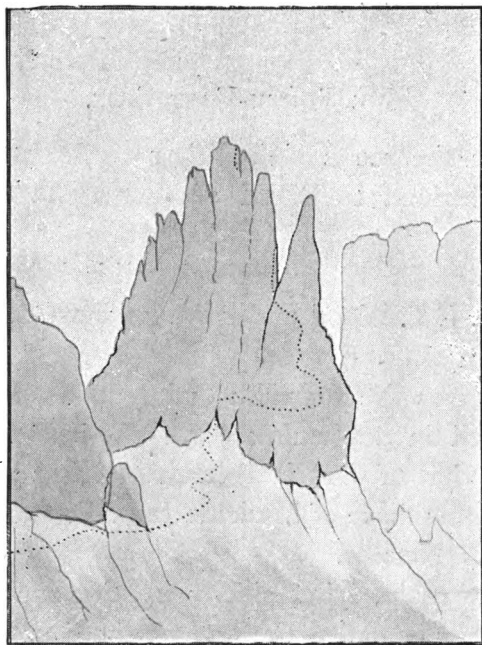
His was the fourth actual ascent, and was achieved on September 9th, 1890, just a week before that of Dr. Helversen and less than a week after those of Madame Immink and Herr Norman Neruda.

This route, lying chiefly up the surface of what may be called the ball at the root of the "thumb," has not hitherto been noticed by the printer.

The present writer was second to Mr. Wood, and as he appears hitherto to be the only one besides who has followed that route to the top, it seemed well that the record and topography

of the Fünffingerspitze should be completed by the subjoined experience.

At 3 a.m. on August 3rd, 1892, I left Campi-



THE FÜNFFINGERSPITZE, FROM THE SOUTH-EAST.

tello through the back-yard of the Hotel Mulino by the light of a primitive lantern, termed a "lampion," carried by Luigi Bernard, who had undertaken to be my guide.

The stream that brawls through the village was crossed by a crazy wooden bridge, and, soon after, we began our way up the steep paths that lead towards the Sella Joch.

The first hours of the march are always dreary; the blood is cold, the body resents the early call from rest, darkness veils the scene from the eye, so the mind has nothing to divert it from the present discomfort and the expected difficulty, consequently the nerves are depressed.

True, the almost mechanical movement behind the guide is physically easy, the dreamy selection of step after step in the flickering gleam of the lantern dimly burning makes no call upon the mental energies, and in due course the exercise hastens the tardy circulation, so that the body is reconciled to its unwonted early work by the time the rising sun brings its flush of indescribable beauty upon all nature. Then a revulsion of feeling begins, and confidence rises accordingly; as once when the writer, who as a tyro had set out with considerable misgiving to try the Cima di Jazzi, was led by the sunrise over the Gorner Glacier to attempt and to make Monte Rosa.

After some two and a half hours of steady ascent we reached the open turf, 3,500 feet above the village. On the way the candle was put out at 4 and a cup of sweet water taken from a spring at 5.

As the day broke we noticed the richness of the flora beneath our feet. *Primula Longiflora*, *P. Farinosa*, and another I failed to recognize; Thrift, Edelweiss, *Anemone Sulphurea*, mostly seeding, but a few, high and late, turned to a pale lavender blue in colour; *Orchis Nigritella*, with its honey-like perfume; several dwarf varieties of *Campanula*, *Trollius*, etc.

Near the top of the Joch we flushed a covey of (six) ptarmigan, and came upon a young one dead but fresh, there was nothing to show, to us at least, the cause of death.

Next, mounting the grava below the Grohmann Spitze, we arrived at 6 o'clock at a cosy shelf nestling at the foot of a gigantic buttress of that mountain.

Here we paused for breakfast as the full sunshine fell upon us.

Although the grava of the Fünffinger stretched higher up, and the snow couloirs above like creamy tongues leaped higher still up its fluted

sides, we were high enough to look over the greater part of southern Tyrol to the south and east.

The huge mass of the Langkofel limited the picture on the north, but peeping round his mighty hip was the somewhat distant Sass Songer. On the eastern side the Boè-topped Sella spread its elevated edge and hid most of my old friends, the Ampezzo Dolomites. We saw the blunt brow of Pelmo still, and had a splendid view of the pretty side of Civetta, at this distance with perpendicular tracery and snow lintels it stood like a Gothic cathedral window, but it is over a mile high. Then turning to the right, came the lesser but nearer Pordoi and Cima di Rossi, which served as a frame on the left of the great picture of the view, viz., the billowy ocean of snow which formed the flat-sloping north side of the peerless Marmolata.

This is the highest and largest of all the Dolomites, and the slope is so gradual on this side and the mountain is so broad that it carries probably more snow from base to summit than can be seen on any other European mountain at one fairly near view. The successive waves of snow gleam rounded and abundant, and seem to

roll across the scene. The glow from the extreme breadth and whiteness is relieved and enhanced here and there by the uplifted forms of dark rock and grim peak of blackest hue. The right-hand frame of this dazzling picture is supplied by the Sasso di Mezzodì, which leaves room on its other side for the wonderful San Martino peaks, the Pala group. The highest of these alone were visible then, but the higher we climbed the higher they rose, as if to assert their own interest in our common superiority to the intervening and surrounding mountains. The Grohmann Spitze behind us, and our own pin-nacled Fünffingerspitze, closed out the remainder of the panorama.

We resumed our way, and made a sharp ascent over rough grava, followed by a very steep snow-couloir, which was capped at its upper point by a cave. In this cavern, none too large for two, we left our nailed boots, one ice-axe, and the superfluous luggage ; then we roped up, and, in the noiseless scarpette, began the real rock-climbing after three and a half hours of steady work.

And the beginning gave an earnest of the task before us.

The overhanging roof of the cave was divided by a narrow cleft running directly upwards. The guide (a fine fellow of 5 feet 11 inches and weighing about 13 stone) fixed both his feet against one side of the mouth of the cave, and, leaning back, wedged his shoulders against the other side ; then, by gradually shifting back and feet alternately, he edged upwards to a narrower space, which he bestrode, and next reached a height, whence, with a sudden turn and effort, he sprang round the rock side-post of the rift to a small niche on the outside of it, where, cat-like, he alighted safely. Viewed from the cave within, these proceedings were very impressive ; I held the rope and braced my feet firmly, expecting every moment to see him slip down upon the frozen couloir which shot its glassy slope steeply down 150 feet to a frightfully rugged rock-slope below. However, he knew his business, and, having reached a firmer perch in the camino above, it became his turn to watch over my attempt to follow him. It was not as hard as it looked, still this long spanning, more perhaps than any other passage, seemed to put me at a disadvantage, and I very nearly felt inclined to ask for the help of the rope.

After several repetitions of similar awkward-looking gymnastics we came to the top end of the camino, and had to bear to the right to get out upon the huge buttress called by Dr. Darmstädter a "back of rock," which runs out from under the base of the "thumb" towards the south-east.

We hoped that this would afford a little more slope at the least than the perpendicular walls which formed the rest of the mountain.

But the peculiarity of Dolomite climbing is, that there is very little chance of diagonal progression. One has to follow either the horizontal line of the strata or the perpendicular line of the cleavage. The last gives a camino, the other may offer a shelf. Consequently a digression to the right or left on such rock means that terror to dizzy heads—a traverse.

The traverse we had to take here was not level, nor was there a continuous shelf, and its difficulty was increased by the towering breast of rock which overhung it; in fact we had to absolutely crawl along it in parts. But it served our purpose, and the method of the guide at this point gave me valuable confidence in his prudence.



LUIGI BERNARD BEGINNING THE FÜNFFINGERSPITZE.

Before he began the crawl he called upon me to "attend to the rope ;" and, as he proceeded, he looped the rope over every projection or point of rock. Thus, in case of a slip, the rope would be suspended as by a pulley, his weight and mine at either end acting as weights to retain it in position. Without this simple precaution he, if he slipped, would plunge down thirty feet or so, and then the sudden jerk would pluck me irresistibly out of my hold and both would go to the bottom. With the rock-points in use, one could, at the worst, only be drawn up to them ; and as my duty in the "*firma loca*" was to watch for the first indication of a slip, a firm pull from me would arrest the fall, so that he could not drop further than the distance between his end and the last point of rope suspension.

Wherever the rock is rough enough to permit this plan of operation, the traversing can be made perfectly sure and safe. But all Tyrolese guides do not take these precautions.

In the same cautious manner I carefully followed, Bernard coiling in the rope as it shortened. Neither this traverse nor a harder one higher up can be considered to be so dangerous as the

one on the Little Zinne, but nevertheless this mountain is much harder to scale on the whole. To quote Mr. Dent in the *Badminton "Mountaineering"*: "The most difficult rock-mountains are not necessarily those with passages of great intrinsic difficulty or danger, but those which it is hardest to climb throughout in a right and safe manner" (p. 240).

Our buttress gave a long succession of ordinary bits of smooth rock-work, the successive ledges being rather like rounded banks of turf than of rock, all worn smooth by the weather. There is little of incident in this kind of thing. To quote again: "The infinite variety of movement constitutes a great charm in rock-climbing, but renders the task of describing in words almost hopeless." The slope was sufficient to allow quick progress, but steep enough to let anything that fell go quite to the bottom, some 1,000 feet below.

Happening to let the eye follow a stone sent down, we saw, upon the grava beneath, three chamois. I had spent two days and most of two nights, with a heavy rifle, looking for chamois in the unpreserved mountains near Cortina, and never got within shot of one; now,

when we have other game in hand, they come out and look at us. They were very graceful in their quick and agile movements, and looked so confident and happy, that it seemed some set-off to know that my disappointment was the life and gain of such noble creatures.

Our course now turned towards the left, following the ridge of the spur, that is to say, we changed gradually from facing due east to north, and then to north-west, and now were making straight for the "fingers" of the peak.

On the way I noticed that Luigi set up little cairns of stones, in the form of a rough cross. Knowing the reputation of our peak, and perhaps misjudging the theology of the valley, I thought at first that a religious feeling was leading him to put a sort of spell upon the mountain. Naturally I did not care to question him on this point; other guides in this land invariably doffed their caps when passing the frequent roadside crosses, and who could tell what may or may not be considered piety in a strange country!

There was, however, a very simple explanation here. We were not following a plainly-marked course, and on these successive backs

of rock one is so like another, that some help is needed to give the "locality bump" a fair chance of re-finding the way on our descent.

For the so-called "guiding instinct" is no instinct at all, but merely the resolute cultivation of the observing faculties. Some men have better observation than others, but none have a heaven-born gift, which serves as a substitute.

In time our buttress perceptibly merged into the cliff of the thumb, and would bear us upwards no longer; but a deep and wide camino appeared to the left (west), a continuation of the cleft which separated the "thumb" from the first "finger," higher up.

To make our way into this gorge, another traverse had to be taken partly around the root of the "thumb." This was much more difficult and longer than the previous one, but there was a good "take-off" at the nearest end, and ample landing space at the other. With my body well braced behind a great pillar, I gave out the rope, and by craning my head round it, noticed the way in which Bernard took the traverse. He adopted the same rope-precautions as before. Every available notch or jutting point was utilized as a support for the gliding cord,

and, speaking humanly, if a slip was probable, a fall was impossible.

We were now landed in the gully, which sloped down on the south side of the cleft, or "Daumenscharte." Here some grava found a resting-place, and so did the snow ; easily surmounting these, we reached the cleft at 7.30. Here, where the "thumb" juts out towards the north-east, we were able to rest at ease on the fork or point of junction, and had an outlook to the north, over the Langkofelkar and the distant Grödner Thal.

But the wind blew from that direction, and it was bitterly cold. We here left our last bottle, and took our last sup of liquid. The north side of our cleft offered no way, up or down, nor could I see where our upward course would lie. The north wind, laden with half-frozen rain, obscured the view at times, and as it swept through the gap, loaded the rocks with a fine spray, which immediately became ice.

And here, as Bernard plainly intimated, the peculiar natural difficulties of this ascent began.

Carefully uncoiling both the long ropes, sixty metres or about two hundred feet together, he joined them, and then he began steadily to

scale the absolute wall of the "fore-finger." Bit by bit he made his way, hand over hand, straight up over my head, as I sat, firmly fixed in the fork, and watched the long line of rope lengthening out. Of course I held it, and held myself ready, in case of a mishap.

As he gradually reached the full distance of the long line, it became a problem whether, if he fell, there would be life enough left in him to make it worth while arresting him at all; still, my duty was to do so, and I selected a capital point of rock as an ally in the tug of war, which might come at any moment.

He was clambering so directly above me, however, that there seemed little chance of his falling anywhere else but upon my body, and that could not be removed. There was no choice of route for him. The cliff was broad and featureless. He went up the whole of the two hundred feet before he was able to stop and turn round, so as to enable him to first haul up the ice-axe, and then, lowering the rope, to call on me to follow him; and he had only the barest niche of foothold there. When I began to follow, I realized the nature of this tall, flat rock-face, polished by the action of water, and

additionally glazed with sleet. It should be stated that Dr. Darmstädter seems to have climbed up this part of the way without making any special comment, so I presume he did not think it difficult. I did, because of the unsatisfactory character of the holds.

If rock be steep, and absolutely even in surface, of course climbing is out of the question. But there are different varieties of unevenness. There may be the uneven surface of the iron-grating kind, in which the depressions, though small and shallow, are sharp and decisive: this kind of broken rock-surface may be scaled, even when perpendicular.

But there is another sort of surface, frequent on weather-worn limestone, which has depres-



THE AXE SUPERFLUOUS.

sions in shape like those which could be found on a featherbed or eider-down quilt, large, and fairly deep, but splay-sided, and with no definite edge. These constituted the only foot and hand-hold upon this tall "fore finger" cliff, and the ice made them both more uncomfortable and more dangerous. The rock, however, was hard and otherwise good ; nothing larger than a hazel-nut was dislodged all the way up, by foot or hand, although the axe in its progress chipped off some fragments, which passed dangerously near to me.

It is possible that this long passage, and the one next above it, nearly as long, may be easier in better weather ; there may have been crevices and corrugations of surface which we could not see, but, if so, the freezing sleet had taken possession ; each rounded knob was iced with a film, beautiful but treacherous, and every hole was set with a frosted jewel, which could only with pain and difficulty be dislodged. My main recollection of that, my longest and hardest piece of wall-work, was that of edging upwards, with "the long steady drag" recommended by Mr. Dent, carefully adjusting the body to every form of depression, so as to keep the centre of

gravity as close to the rock as possible. We have been instructed that the amateur on rock should carefully observe which foot the guide leads off with, and then accurately follow in his tracks. Such advice may be useful to the very beginner, for very short bits, but who could note the use of right and left all the way up such passages as occur on all these steeper Dolomites?

One hardly used the feet at all on this cliff, it was more a case of hugging the rock all the way up, snake-like or lizard-like, intruding the elbows, and sidling-in the knees, also keeping the head well in for balance sake, knowing all the way that the base of support was not fairly outside of the plumb-line of one's weight, but helping it by such adhesion of limbs and chest, as grasp and friction of rock-surface afforded. It was hard work and cold work, but the strain upon the fingers hindered their feeling the full effect of handling so much ice in such a whistling northerly blast as that which swept across the precipice. The guide, poor man, had no gloves, and frequently stopped, and hung by one hand, while he warmed the other in his pocket. I wore a pair of stout old dogskins,

which sheltered the back of the hands, while the finger-tips being soon worn through, they did not impede the gripping power.

Changing places with difficulty at the top of



A STIFF ARÊTE.

the first stretch, Luigi went on again over a similar piece, nearly as long, until he reached a fairly broad shelf—the axe followed, and so did I.

From this point some easier work—easier because broken up into short passages, where the rope easily commanded the difficulties—brought us to the edge of the very sharp, and very upright arête, which is

the northern edge of the “forefinger.” Imagine a high wall, roughly broken off at one end: up over the rugged but nearly upright end was our way. Here, if we are to understand that he climbed so far, Dr. Darmstädter deemed it

safer to turn back, "as the rocky arête, which came next, was so extremely steep and disintegrated, that it seemed too friable and dangerous."

He might well have distrusted it, for it was untried when he saw it, but for me there was no such excuse, as Mr. H. J. T. Wood had successfully negotiated it, some time before.

We were now climbing on the north side of the mountain. We found that the whole length of the double rope was needed here more than once, and the ice still interfered with the hold; but the worst arête offers more chances of grasp, than a flat face of rock, for sometimes one can do fairly well by breasting the edge, and clasp- ing the arête in the arms. Fortunately we did not find the rock friable, for once or twice I was absolutely suspended by such a clasp alone, neither fingers nor toes being within reach of any hold.

But Luigi held gallantly on his way, and the intense cold urged both of us to continual action.

After half-an-hour of this work, he pointed out, across a gulf on our right, a snow-camino coming down from another "finger," forming a

cleft in the otherwise unbroken cliff. It was very narrow, deeply cut, steep, and had overhanging sides. The lower end, or snout, a shoot of ice, projected beyond the cliff and overhung a depth of invisible extent.

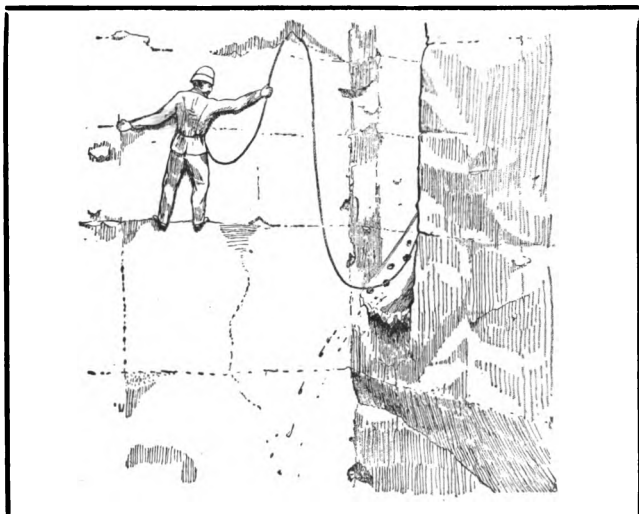
It was Bernard's purpose to enter the bottom of this camino, by making a traverse around the bay, between our "finger" and the next. The beginning of this traverse was easy, and a broken shelf afforded a firm resting-place.

But there was a very critical passage from this ledge, down and round the pillar of rock, which formed our side of the camino, and here Luigi hesitated a great deal, and muttered a few of what sounded to me like gentle objurgations.

I fixed myself in a place where, if my own footing was uneasy, a crag above afforded a perfect safeguard for the rope; and the guide, after reiterating his cautions about the rope, and examining my arrangements, gradually screwed himself round the pillar, and hanging out over the snout of our narrow glacier, began to utilize the ice-axe, which we had so laboriously borne with us.

He was a long time cutting the first two or

three steps, and the blast, smiting my back and outstretched limbs, was chilling in the extreme. He soon vanished round the rock-post, and I could hear him chipping the ice, as he slowly made his way up. This was probably the most



HOW FALLING BODIES DESCEND.

dangerous part of the whole ascent, and while the cold was intense, I knew that I dare not relax my attitude while he, trusting to the rope in my charge, was hard at work.

The snout of the ice-shoot came out over a sheer precipice of unknown depth, overhung it,

in fact, and every particle of ice dislodged by the pick whistled down over the frozen surface, and darted down into space, giving me an ominous hint of the way any other falling body would descend, if it fell in that camino.

The time he took to cut his way up that gully seemed interminable. The cold was intense, my head alone was movable, and I exposed each side to the north in turn, until both were fairly matted with ice.

At last I heard a "voice far up the height," which cried, "avanti!" And at that welcome sound new life flowed through me, as I shook my frozen limbs, screwed round the corner, crept into the ice-steps, and then with all fours, as on a treadmill, effected the quickest bit of ascension in my experience. Luigi fairly laughed out, as I ran up to him more quickly than he could haul in the rope.

The peak was now virtually conquered. A little clambering and traversing, and we came through a cleft on to the south side once more. An easy gully led us through a natural arch, where a huge block had settled in the cleft; under this we crawled, and in a few minutes were resting on the summit, at 9 a.m.

We had taken six hours from the village, two and a half from the snow at the bottom of the rock.

This summit, like all those previously mentioned, had quite a little plateau on the top, perhaps ten yards by twelve in extent, and slightly sloping towards the south.

I see by my note book, we stayed fifty-five minutes on the top, and, better provided than our predecessors, enjoyed a frugal luncheon.

We found the tin box, and placed our names in it—but unfortunately, in my ignorance of the history of the mountain, I failed to appreciate the importance of the fact that the cards already there were few in number, and only of recent date, and I did not look for those of Messrs. Schmitt and Santner.

Our return was effected by the same route, and in exactly the same time to the foot of the rocks, viz., two and a half hours.

Luigi observed the most admirable caution all the way down.

The descent of the high wall of the “fore-finger” was a lengthy business, and again I had to rest on the “Daumenscharte,” but this time in idleness, for Bernard was using the

rope alone in the doubled fashion adopted by Constantini on the Croda da Lago. But Bernard had three times the length of cord to manipulate, and found it needful to smooth the neck of his rock-pulley, by placing some folded letter-paper, so that the rope could freely run over it. Even with this lubricating medium, the long cord once refused to slide, and the guide had to climb a long piece up again, to set it right. In the gully just below this fork, a loose stone block, half hidden by snow, rolled quietly but crushingly upon my hand; I saw it starting, watched it gliding nearer, knew it would settle on my fingers, but I could neither arrest its progress nor remove my hand out of its way from my hold. Fortunately, I got off with nothing worse than a black tip to one finger. This served to remind me for two months after returning to England, that I had shaken hands with the Fünffingerspitze.

Picking up the 'stone men' one by one, Luigi guided me expeditiously down over the great buttress, and past the first traverse, to the lowest camino; at the bottom of which our cave still held the impedimenta cast aside on attacking the rock. Another luncheon followed,

and without further incident, we arrived at the Albergo Mulino, exactly at two o'clock.

Comparing the accounts of the other two routes with our own experience—there is little doubt in my own mind as to which is the easiest. Although this mountain is by far the hardest climb I have done, yet, unlike those who have described the other routes, I have little doubt that our own way was the least difficult.

A comparison of the respective times will probably show this.

		Time of whole expedition.		Rock-work only.			
		h. m.		Ascent.		Descent.	
		h. m.		h. m.		h. m.	
South side.	Messrs. Schmitt and Santner ...	16	35	4	0	4	30
North side.	Mr. Norman Neruda	15	25	4	30	5	7
	Dr. Helversen ...	17	0	4	5	3	10
South-east side.	Our party ...	11	0	2	30	2	30

As a melancholy appendix to the stories of the assaults on this mountain, I give the sad record of what I believe to have been the next attempt to my own, taken from the Italian Alpine Club's "Rivista Mensile" for September, 1892.

“ACCIDENT ON THE SUMMIT OF THE
CINQUE DITA.

“On September 6th perished, on this most difficult summit Mr. E. Stücker, of Stuttgart and the celebrated guide, Joseph Innerkofler. They had left S. Ulrich di Gardena at 1.12 the same morning, and as they did not return, two experienced Alpine climbers, Messrs. Rudolf Savor and Emil Artmann, of Vienna (who had engaged the above-named guide for expeditions in the Dolomites of Gardena), started from S. Ulrich to search the mountains. Darkness stopped them from passing the rocks, but after resting for some hours, in a hayloft by the Passo di Sella, they contrived to search next morning, and at seven o'clock found the bodies together, still roped, in a couloir above the fork between the Punta Cinque Dita (Fünffinger Spitze) and Punta Grohmann (*i.e.*, at the foot of the south side of the mountain). How the misfortune happened can never be clearly known. It was probably in consequence of a slip. The difficulties of the ascent, already great, were doubled by the condition of the mountain in consequence of the change of weather; there

was fresh snow, and the temperature was so low that two daring Alpine climbers such as Messrs. Artmann and Savor had given up the ascent which they had intended to undertake with Innerkofler, who was in their employment. Mr. Stückler, trusting to the courage of the guide, chose to undertake the ascent with him, in spite of dissuasion, neither did he know the ordinary difficulties of such an enterprise, for this was his first visit to the Dolomites. As for the guide, we must acknowledge that Sepp. Innerkofler, after many arduous undertakings happily accomplished, had become somewhat rash, witness the fact that he wanted to have a bet with another guide, Fisbill, to ascend Punta Grohmann and Punta Cinque Dita in one day. The night before the ascent, at S. Ulrico, in a circle of tourists, he had been much advised especially to give up this rash plan, but he had shown thorough confidence, so much so as to reassure his interlocutors.

“Apropos of this misfortune, the particulars of which we have gathered from the ‘Alpenfreund,’ No. 84, the brave Alpine climber Louis Friedmann, in the Austrian ‘Alpine Journal,’ No. 358, lays down as a principle that

in general a climber should only set about undertakings (he means chiefly rock-work), the difficulties of which he is thoroughly equal to overcoming, and where the guide's rope need be relied on only for security or for assistance, not for hauling up. Herr Friedmann brings other valuable considerations to bear, which are too long to repeat here. As for the way in which the accident may have happened, he rejects the idea that Innerkofler may have had a fall in a difficult place; and thinks it more likely that the tourist fell while standing in some place where he had to wait while the guide clambered on in front; so that he may have dragged the guide down a precipice while he was intent on climbing and not prepared for a wrench."

VIII.
THE LANGKOFEL.

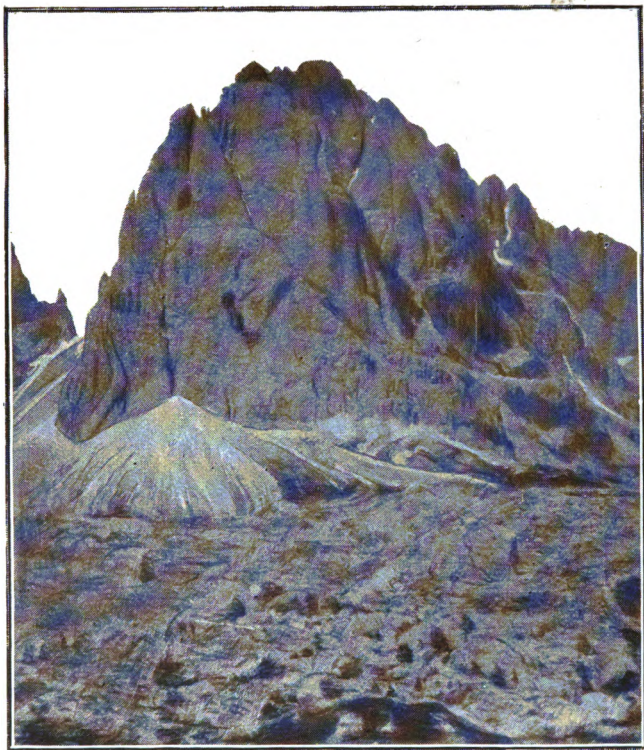
VIII.

THE LANGKOFEL.

No description can give a fair idea of the overwhelming bulk, lofty sides, and beetling cliffs of the mitre-like Langkofel. Standing at the extreme northern end of the Fassa range, it is somewhat turned away from the Campitello valley, but on the northern side it looms dark over the Grödnerthal, and forms a striking object even from St. Ulrich, several miles away. It is certainly one of the representative peaks of the Dolomites, and it ranks with Pelmo, Sorapiss, Marmarole, and Marmolata, for bulk and height. Of course a mountain like this, supposed at one time to be the highest of the Dolomites, was made one of the earliest points of attack by the mountaineering fraternity. And ere long one of its chief summits (for like the Cinque Torri on a grander scale it is cleft into three if not four mighty heads) was cap-

tured by that most successful of German climbers, Mr. P. Grohmann, in 1869. He was accompanied by Peter Salcher and F. Innerkofler. The last named is now the sole survivor of the three noted guides of that name, the same who led the way when we climbed the Little Zinne.¹ Later on, Mr. Tuckett, with Santo Siorpaes also achieved another peak; and an interesting account of an ascent of Mr. Grohmann's summit is given by Captain W. E. Utterson Kelso in the "Alpine Journal," vol. vi., p. 203. But although this proved the mountain over twenty years ago to be conquerable, it has not been assailed often. It is not a favourite mountain with the English or any other Alpine Club. No hotel accommodation can be got within five or six hours of hard uphill tramp of its base, and there was no Alpine hut (1892). Its enormous size adds the fatigue of a snow mountain to the difficulties of a Dolomite peak. The rock-climbing is nowhere easy, the snow-work is of the steepest, the ice-work is unusually extensive and critical, while, above all, the necessity of ascending by way of long

¹ There is now also Josef Innerkofler, Jun., who successfully follows the family profession, and may be found at Schluderbach.—*Note to Second Edition.*



THE LANGKOFEL.

(From the South.)

couloirs, which from their steepness are rather chimneys, enforces so much long continued exposure to the danger of repeated avalanches and perpetual volleys of falling stones, that only in certain states of the atmosphere and at certain degrees of temperature is it a mountain to be attempted with safety. And to attempt a mountain without safety is not true mountaineering.

For myself I had not heard much about the peak, and had never known a man who had climbed it except the guide.

He suggested the Grohmann Spitze as a preferable expedition, and said that there was one place in the Langkofel where the risk of falling stones made the ascent really perilous.

This, however, was the mountain still upon my short list, and no other. Therefore, learning that the stonefall was entirely dependent on the weather, I determined to test the matter on the mountain itself, intending to turn back resolutely if the temperature proved to be unfavourable.

At 2.30 a.m. I left the Albergo Mulino, not without a feeling of satisfaction at the thought that I should not return. A telegram had been sent to Herr Lardschneider, host of the Hotel Rössl in the thriving village of St. Ulrich, in

Gardena, and there our day's journey was destined to end, seventeen hours and a half later.

There was no moon, so the guide carried a lampion before us until dawn. The night was foggy and, as we found when mounting the pasture hills, very warm. The guide and porter both called for frequent halts in consequence, and, as with our day's work it was necessary to force the pace, the time was unwillingly given. However, the tourist may generally be thankful for the "pack" which handicaps the professional and gives the amateur breathing-time.

Our way over the Alps was the same as that taken for the Fünffingerspitze, but we did not reach the foot of the grava until 5 a.m.

As the morning dawned the fog began to thicken, and without being able to see a dozen yards in any direction we began a diagonal clamber over the *débris*, our aim being to reach the fork between the Fünffinger and the Langkofel.

After some progress I began to think that we were bearing too much toward the left up the hill. A halt was called, and a consultation followed. We knew the mountain bases were

near, but where were they? If we kept too far to the left we should get between the Grohmann Spitze and the Fünffinger; but if we wandered too much to the right we should get round to the wrong side of the Langkofel and could not repair the mistake that day. This latter danger was most apprehended by the guides, while I feared the former.

We determined to shout, and an echo came straight down over the grava from the mountain before us. This prompt answer told us we were near the base of something high, and we clambered up the slope until we reached it. But rock was rock, and although we had been told that only the Langkofel in this range contains the elements which differentiate the true Dolomite, yet in the bulk there is no perceptible difference. The question remained, which mountain is it?

I said the Fünffinger, and pointed to the right as our course, but Luigi laid down his pack and explored along the base of the cliff towards the left, and in half-an-hour returned with "maladettas," and, in the fog, I had proved to be the better guide.

We had touched, as it turned out, the base of

the great buttress so useful to us in climbing the Fünffingerspitze.

The trend of cliffs to the east now forced us down hill some distance, and, getting clear of the promontory, once more we lifted up our voices in the gloom. It seemed ridiculous for a party of men in that solitude to be crying out to the mountains to reply and tell us where they were; but they were ever ready, and a clear but distant hail from the north cheered us as the voice of a friend, for it could come only from the mighty cliffs of the Langkofel.

Our course towards the "forcella" or pass could now be intelligently directed, and as soon as we reached it the north-westerly wind cleared away the mist and revealed the Grödnertal and the country beyond. Our mountain being accessible only from the other or northern side, it was necessary to pass over the "forcella" and down into the Langkofelkar. And a rough scramble it was over a rugged tumult of rocks big and little. A grand slope of snow helped us down the other side with a glissade of several hundred yards, and we found a more level valley, with the foot of the Langkofel grava on our right and the snout of a small glacier on our left,

called the Grohmann Glacier. From this side we could look back and see the northern face of the Fünffingerspitze and could trace the deep perpendicular score of the tremendous camino which formed the route of Herr Norman Neruda. In cooler and drier weather we now struck off diagonally over the grava to the right, reaching the true base of our mountain at the only feasible point of assault at the late hour of 7.30 a.m. The packs were deposited, and, after a very brief rest, we took to the rocks where a low reef seemed to stand out from the main body of the mountain. Travelling at first in a southerly direction we soon turned in the opposite line, and then again to the south, making ground ever upwards and trending towards a huge ravine which now appeared in the heart of the mountain. For the Langkofel is strangely hollowed out with fissures like the little Cinque Torri but with a vast interior space like an amphitheatre. The casual observer would have no hesitation in saying this is an extinct volcano and here is the crater. Within this hollow, and sloping down from the cliffs on the south of it, lies the Langkofel Glacier proper, which I imagine can be seen from very few places in the

surrounding country ; but the fog, which now came on again, obscured our more distant views, if there were any. From this point a gentle snow-slope led us further upwards until (at 8.45) we saw an opening on our left, the first of the long steep couloirs which give a character to this expedition.

Here we paused and had Griffi (= crampons) fastened under our boots. This instrument consists of a strong iron or steel cross elongated to the length of the foot, with a steel spike quite an inch long at each arm or point, and some between, all of course pointing downwards.

Shod with this a man cannot slip on snow, nor on ice unless it be very steep and of the black and hard variety.

Looking up at our couloir from below, it seemed to me an utterly impossible piece of work. This I suspect was greatly owing to the effect of the whiteness of the whole extent of the long thin line stretched up before us. The glare brought forward the upper end and made it look almost perpendicular ; it was, as a matter of fact, an easy gradient compared with what followed.

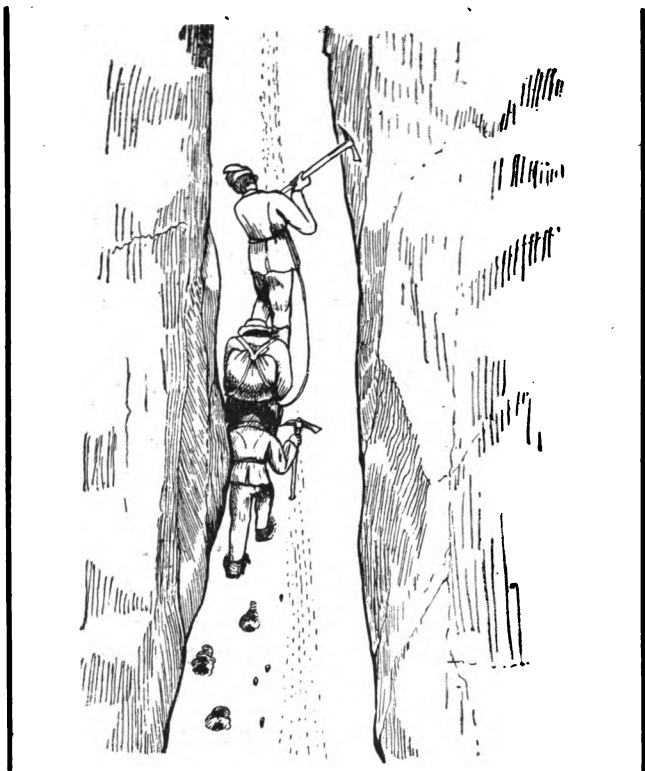
We then began the couloir, which was some

twelve to twenty feet wide and enclosed by smooth high cliffs on either side.

Of course, step-cutting was a necessity all the way up (and, as it turned out, down also). Bernard said there were about 500 steps to cut, I thought hardly so many, for we took little more than an hour in ascending it ; but the snow here was in capital condition.

At the top of this couloir we reached a vague kind of saddle through which we passed, and then took a rock traverse, not difficult, to the east. This was interrupted by two ice-slopes and one of snow, easily crossed with the aid of cut steps and the "Griffi." Couloirs opened out in different directions from this new valley, but the guides stopped at the bottom of a chimney filled with ice, rising steeply on our right. It ran up through black and shining walls of rock to a great height and slightly bending to the left near the top concealed its upper end. The cliffs rose sheer to the very crown of the mountain and even seemed to overhang the black gully. It was steeper and less tempting than any other cleft we had seen, and it was narrower. But the point that enlisted all my interest was the deep furrow, some seven

feet wide, down the middle of its stream, ploughed by the sweep of the stones and ice-



THE ICE CAMINO.

blocks which had dropped from the beetling precipices above.

This was evidently the crux of the ascent ;

and if Luigi had not called for a short rest before tackling the hard ice-chipping which was before him, I should have asked for time to watch this ominous score and test the present activity of the missiles.

To my happy assurance neither bit nor scrap swept down while we were watching. Indeed, the temperature itself was a guarantee, for it had become very cold ; still the personal observation was the most satisfactory evidence, for had anything ponderable fallen within any part of that couloir it must have inevitably reached the main central stream and thence have shot to the bottom.

With confidence, where it was most needed, we began the ascent, not from the bottom of the ice but over a slippery shoulder of rock on the right of it. This did not carry us very far, and soon we were on, or rather clinging to, the face of the ice, which offered the only means of ascending this forbidding camino.

The sun never shines into its depths, and, with the sleet and hail which now began to pelt upon us, our surroundings were chilly and gloomy beyond description.

Fortunately I had brought, in addition to the usual double flannels and vest and jacket of

ordinary mountain wear, a cricketing flannel; this was quickly brought into use, and followed soon after by a substantial overcoat. Notwithstanding these additions, I think I never felt such bitter cold as when waiting in the ice-holes of this long chimney.

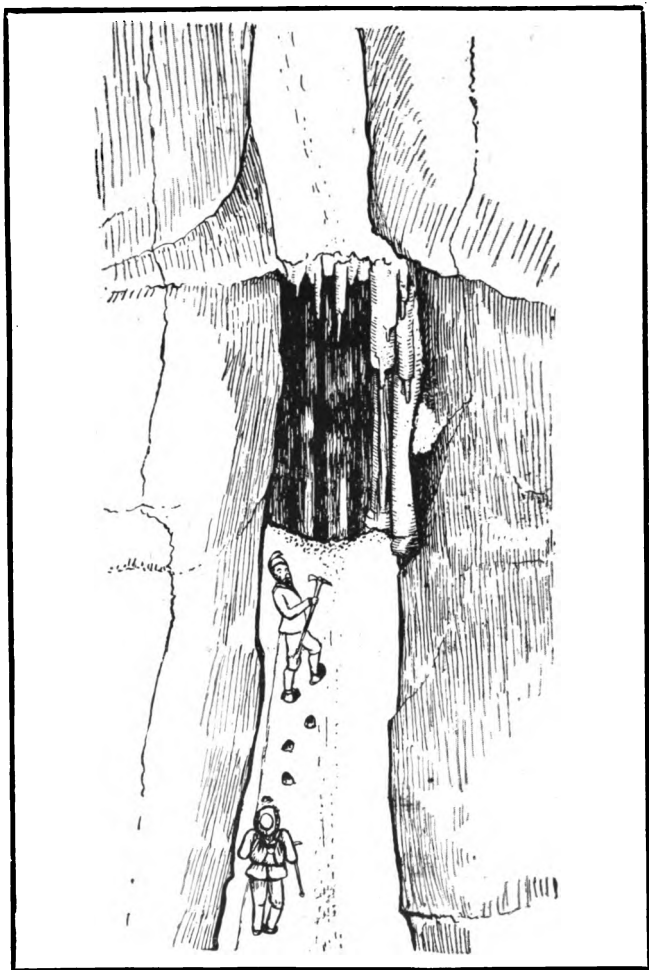
The guides said it would take about three hundred steps to reach the top, and as a serviceable step in such steep ice is big enough for both feet (and head as well), the cutting was an affair of time. Ice does not lend itself to penetration like even the hardest snow; it has to be chipped and splintered with the pointed pick of the axe until a sufficient depth is reached not only for the foot, but also for the leg to stand upright, so the hole can never be a neat one. In snow the steps are a series of pigeon-holes, in ice they are large, rough, splay-sided cavities. This work is exhausting to the cutter, and tedious to the others. We are told in the Badminton "Mountaineering" (p. 170), that "a good guide has been known to take seventy strokes to fashion a step. The greatest number is required in cutting steps for a traverse of a very steep ice-filled gully." We were not merely traversing, we had to follow the length of our gully. Luigi,

upon whom the whole of this work devolved, paused frequently for breath, and the shower of hail at times compelled both men to put up their mittened hands to save their ears. As the steps were being rapidly filled with hailstones, we drew up together. *There was no risk in this*, the ice was hard and securely wedged against the rocks on either side, an avalanche was impossible; and it had the great advantage, especially when Davarda passed beyond me, of protecting from the hailstones the lowest in the line. By leaning slightly forward, I obtained ample shelter under Davarda's pack.

But very soon a torrent of hailstones had formed in the couloir, and it poured down a rattling flood around and above our knees, filling up every vestige of step, and carrying down any slack loops of the rope, so that we had all our senses absorbed in the grim struggle to hold our own.

The guides behaved manfully. Many would have quailed at this visitation, but these men gave no hint of turning back. Perhaps they welcomed the chance of effecting the ascent in what, for this particular peak, appears to be the safest weather.

About midway up the couloir or camino (I hardly know which term it best merits), we came to a check. The hailstorm abated also, fortunately. The comparative peace that now ensued enabled us to detect the noise of falling water behind the ice. We discovered that, owing to the narrowing together of the rocky sides, or from some projecting shelf beneath, at a point just above us, this stream of water forced its way to the surface, and actually formed a small waterfall immediately in our way. A trifle in itself, it proved a serious obstacle to men in our position. The rocks at the sides were ice-polished, steep, and covered with "verglas;" the ice above the fall, even if attainable, was in the form of a cornice. Ultimately, by dodging in close to the fall, and dexterously hewing small notches in an ice-pillar at the side of it, Luigi managed to screw himself round and upwards to the more stable ice above. He then helped us up with a rope, at the expense of wet feet and legs, and again the monotonous pick resumed its work. Nothing in all mountain-climbing makes one feel more desolate than waiting with the feet half-frozen into deep ice sockets, while the panting guide is chipping, chipping, chip, chip,



A CASCADE IN THE WAY.

chipping, with little or no effect at the steep black ice above. Only by constantly lifting the feet alternately, and occasionally beating them with the fist, can the circulation be kept going, and the terrors of frost-bite avoided. Yet one had to effect this movement with the greatest caution, observing the most steady balance, and ever keeping an eye upon the rest of the party, in case of a slip while cutting or advancing; for this duty of watchfulness is the part of those who should be standing still.

I had one consolation from the bitter cold, the cliffs above were firmly ice-bound, and nothing could fall upon us. Had the day proved warmer, the melting of the ice would be continually releasing the flakes of stone which its previous congelation at night had forced off from the rock. We knew there were volleys of them ready to fall, but the frost held them, and not one fell while we were in the couloir. Had they fallen we must have been struck, for our gorge was a natural funnel, every stone would sweep our position in the narrow channel, and there is no doubt that a blow from anything of even cricket-ball size, from that height, would be fatal.

The hailstones at one time gave us some anxiety as to their loosening force, but fortunately these apprehensions were groundless, and at last we were high enough to take to the rocks on the right again. These rocks were, of course, glazed, and prettily decked with frozen hail-stones. They were a succession of high breasts with no horizontal ledges, and would be difficult at all times, but they were exceptionally so in this condition, particularly to men who had already done nine hours of continuous pace-forcing hard work.

These smooth breasts brought us ultimately to the summit at noon, and as we flung ourselves down beside the huge 'stone-man' on the top, the hail, nearly turned to snow, came down thicker than ever.

In a very few minutes our prostrate bodies were buried, and were it not for the blast, which swept portions of the summit clear, we could have distinguished nothing besides ourselves and the fleecy masses. Nevertheless, roped securely together, we kept up the traditions of luncheon time, and I remember how a tumbler half-filled with wine was quite filled with hail-

stones before it could pass to my lips from the guide's hands. Of course any view was out of the question, but our point was won, the last rock-work had warmed us, the snow was a bright cloud about us, and we felt very jolly and comfortable.

Ours was the first ascent of the season, and I have heard of only one attempt since. On referring to other records, I find that our "time up" was unusually fast, owing, probably to the good condition of each member of the party, and the intense cold, which rendered active efforts absolutely needful. After collecting "the summit" (now highly promoted), in less than half-an-hour, with the blinding storm still beating, we began to feel our way down, and now we found the value of a second guide to lead the way. With very trifling uncertainty, and no serious deviation, Davarda took up one by one the line of stone pinnacles which Bernard in ascending had propped up on every salient edge or point, and we made fair progress.

The descent of this breast of rock was worse than the ascent. The irregularities were more hidden, and the "Griffi" felt more cumbrous. It was a question whether ice or rock predomi-

nated, but one always feels warmer in descending, and at length we reached the place where we had left the couloir. Here we found that every step was filled up. Davarda had to find them and clear them out, a task which his boots seemed well fitted to perform. Both he and I went down backwards, *à la Bruin*, the whole way; but Luigi, ever-watchful, had to turn, whenever the slope permitted it, to keep an eye upon our motions. As usual he was very cautious, and never permitted more than one to move at a time, and the full length of the long rope was brought into use.

Another wetting awaited us at the waterfall, but without further incident we reached the rocks again and were thankful.

The rest of the descent called for no notes. The snow couloir was negotiated with the same care but with less anxiety, Davarda handling the axe, and at the bottom of it we took off the "Griffi" and felt that our labours were over.

But although the rocks from this point to the base of the mountain were in no place unusually difficult, they were never easy, the attention had to be kept always on the strain, and from

any point a slip of the whole party would be arrested only by the grava at the bottom.

Davarda still led the way, but he had cast off the rope. This was the thoughtful idea of Luigi, who knew what a perpetual nuisance, in the descent of steep rock, is caused by a rope in front. It draws the tourist's eyes too far downwards. The moving man at the end of it perpetually attracts the attention. The rope gets caught in a crag or entangles itself around the feet. Therefore, for the sake of the descent alone it seems probable that the best number upon the rope is two and no more, for rocks. Even in ascending a difficult rock-peak the rope behind with a third man on it is also an encumbrance. If held loosely it catches in irregularities, if too tight it jerks the tourist at every step; only a very attentive second guide will manage it so well as to entirely prevent sudden checks. Moreover, men are more likely to keep the golden rule "only one man to move at a time" if there are only two than when there are three or more upon the rope.

I am aware now that the printed authorities are against my views, perhaps they are legislating generally and for snow chiefly. Be that

as it may be, in my opinion the best number upon the rope both for ascending and descending steep rock, like that to be found on the Dolomite mountains, is two and no more, as a rule. But I do not pose as an authority.

If, however, a dangerous slant has to be taken over a piece of rock like that on the Punta della Madonna, or like the one on the Croda da Lago (mentioned on page 16), then a second guide is needed in case of a slip.

Another exception may be permitted if the illness or disablement of one of the parties is expected, then a third man is useful, and even a fourth and fifth. But this is legislating for contingencies which should be prevented rather than cured, contingencies which do not touch the question of climbing proper.

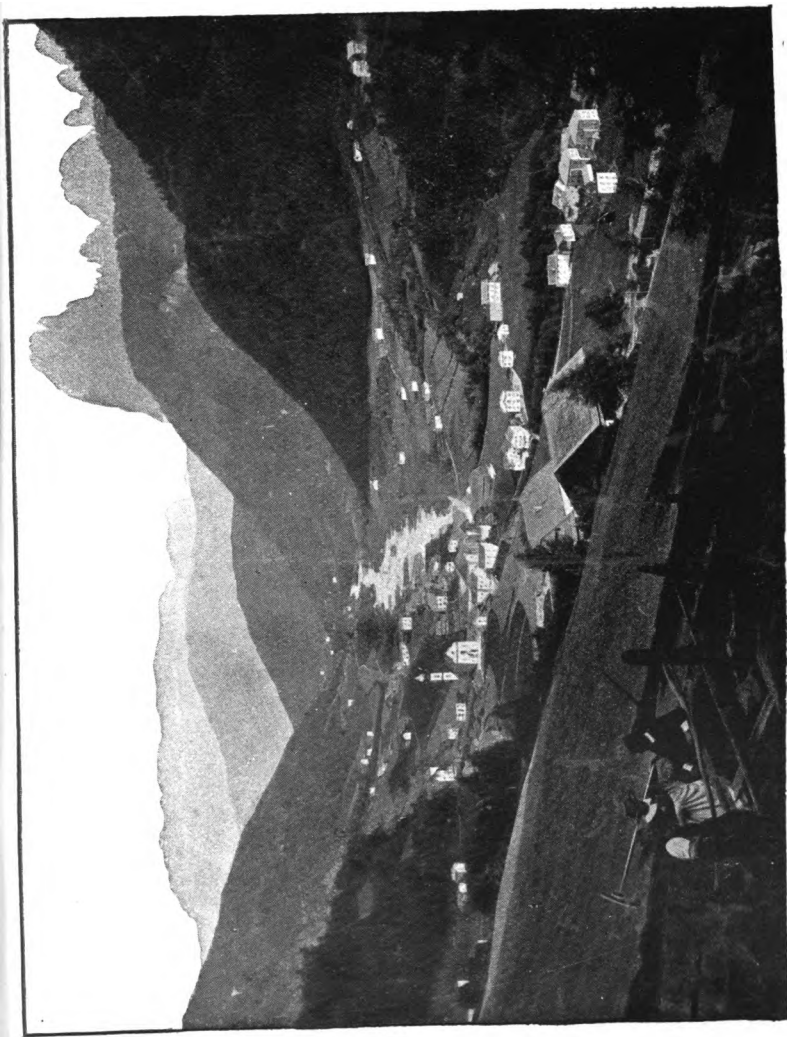
By 4 p.m. we reached the "grava," and there I parted with Luigi Bernard, the safest and most trustworthy of all the six Tyrolese guides with whom I have done any climbing. He does not lack enterprise; he found a way of his own up the far-famed Fünffingerspitze, and persevered in it after good men had tried it and returned in good weather unsuccessful. But his great characteristic is that *cautious*

habit which alone justifies mountaineering, and, without which no climber, however physically gifted, can ever be a first-rate guide.

Giuseppe Davarda, who is a beginner and a promising one, accompanied me to St. Ulrich. He was bright, cheerful and willing, and, the evening proving to be a fine one, we ran most of the way over the elastic turf of the Seisser Alp, the largest of all these upland pastures. After some two hours of this we took the road at Santa Maria and trudged along by Santa Christina down the Grödnertal to the thriving village of St. Ulrich, noted for its wood-carving and toys.

The hotel Rössl was gained at 7.30 p.m., and amid the cheerful warmth and pleasant company there, both mind and body were speedily refreshed.

There were some hundred guests—Hungarians, Austrians, Italians, many of whom had been there for weeks, and all of whom had gazed upon the Langkofel and talked of it. But no one had ascended it that season. And our story was welcomed, at the *table d'hôte*, and from Davarda in the general tap-room. I can



THE LANGKOFEL.
(From *St. Ulrich*.)

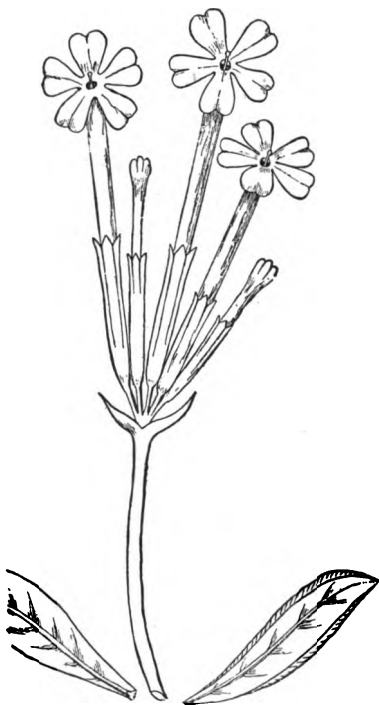
recommend this hotel. There was excellent amateur music, and super-excellent singing. The society was charming, and there were no British, yet most of the visitors were acquainted with the language, and soon the dental notes of our Anglo-Saxon speech became so general that an irate Medico (from Bohemia) left the hotel in disgust, muttering, "There is nothing but English spoken now in this hotel, I am off."

Looking back upon these excursions, the chief thought suggested is, that such rock-climbing as this is the best possible sort of exercise for the co-ordination of mind and body. Every muscle of the whole frame is brought into play. It is an admirable discipline for the nerves, the will, and the mental-motive faculties generally.

As to danger: all sports are open to some danger, and mountaineering on rock is not more dangerous, to those who are determined to make every step a safe one, than a spin on a frozen lake, or a run with the hounds, or yachting.

In concert everything should be done to

avert the bad consequences of a possible slip; while the individual should try to make a slip impossible by taking every personal precaution. The only good climbing is safe climbing.



PRIMULA LONGIFLORA.

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DOLOMITE STRONGHOLDS.

OPINIONS OF THE PRESS ON THE FIRST EDITION.

From "THE TIMES."

"The Rev. J. Sanger Davies is an enthusiastic mountaineer with a particular fancy for Dolomite peaks and rock walls and 'chimneys,' the very contemplation of which is enough to bring on a fit of vertigo in ordinary stay-at-home heads. We sincerely hope that he will not have any fatal accidents on his conscience through the publication of his little book . . . a very attractive little quarto volume, with illustrations from photographs and drawings by the author, some of them merely charming mountain views, and others suggesting the very lunacy of mountaineering. . . . When we add that, according to Mr. Davies, the normal method of climbing the Dolomites appears to be to proceed along a ledge some nine inches wide, overhanging the abyss, the climber here and there being able to support his hands by little holes in the rock out of which fossils have fallen, the reader will appreciate the irony of the remark with which his book concludes, 'the only good climbing is safe climbing.'"

From the "SATURDAY REVIEW."

"Mr. Davies went in by choice for the Strongholds, which were the last to resist assaults, and whose very aspect had for long deferred attacks upon them. . . . As for the characteristically named Fünffinger-spitze, it has a fatal reputation; more than one experienced guide has lost his life there; the climbing is continuously dangerous, so that the strain on the nerves is sustained. Here there is a most thrilling description, with a drawing of getting out of a cave with an overhanging roof, and ascending a smooth and frozen couloir of very awkward width. That ascent was effected in intense cold which infinitely increased the suffering and the peril, for the blood was frozen and the limbs were benumbed during long periods of waiting while the guide was cutting the steps. On the Langkofel they were caught in a terrific hailstorm, when 'in a few minutes our prostrate bodies were buried, and were it not for the blast which swept portions of the summit clear, we could have distinguished nothing besides ourselves and the fleecy masses.' The reward beyond the pure excitement was, of course, in the superb views from the summits when the weather is clear; but the traveller who is content to keep modestly to the valleys can have equal enjoyment of those many-hued morning and evening lights described by Mr. Davies with an eloquent enthusiasm which reminds us of Mr. Black's . . . Hebridean sky-pictures."

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. . . "He (Mr. Davies) is a climber of the most advanced and accomplished kind, fearless and cautious both, according to the laws to which we have alluded. . . . The peak of the Five Fingers is the centre of the Fassa group, and the whole of Mr. Davies's attack on the Stronghold is a matter for interesting description. . . . Mr. Davies's book ends with a spirited eulogium on his favourite sport . . . it is a good book, and as far as description can really reproduce feats of the kind, it is, to our mind, very successful."

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